August 18, 1986

Chemical Marketing Reporter

NEWS AT HOME

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THE MARKETS

CMR MARKET INDEX

CHEMICAL MARKETING REPORTER's market index of chemicals and related materials (100=1974 average), based on 97 key commercial chemicals, appears alongside with data for two weeks ago, last month and last year.

August 15, 1986	151.54
August 8, 1986	151.43
July 18, 1986	153.05
August 16, 1985	153.12

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CHEMICAL MARKETING CUES

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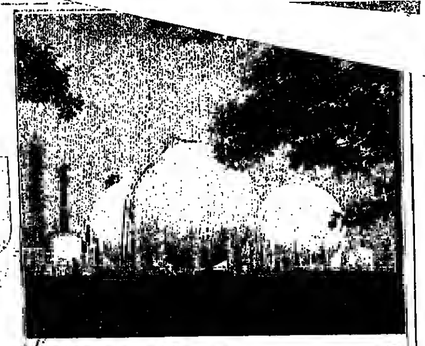
Chemical Marketing Reporter



VCM on a Tear 3

NEWSPAPER

INSIDE CMR

Oil Effect on Petrochemicals Is Swift

The current firming trend in the crude oil market has provoked a swift reaction from basic petrochemical producers. Benzene spot prices increased 10 cents per gallon in August, and ethylene producers launched a 2 cent per pound increase for September 1. Several other products have also been increased in price, and one observer claims that petrochemical prices will be hiked "across-the-board" by the fourth quarter.

Underlying this trend, sources say has been firming crude oil prices on the futures market precipitated by an agreement in early August by members of Organization of Petroleum Exporting Countries to install production limits in September. Actual prices for crude paid by oil refiners have also increased, one source says, rising from an average price of about $13 per barrel just before the OPEC accord was announced to about $14.25 per barrel now. The average selling price of crude oil in the Gulf also increased slightly in July from a low of $12.25 per barrel.

As spot benzene prices and other chemical values were hiked in reaction to and anticipation of rising crude prices, several analysts were skeptical that a sustained run-up in oil prices will actually occur. Ian James, senior economic analyst for E.I. du Pont de Nemours & Co., doubts that the current OPEC agreement will succeed any better than several preceding ones that quickly crumbled. He also points out that most of the current oil price increases are paper transactions, and very little has happened to actual delivery

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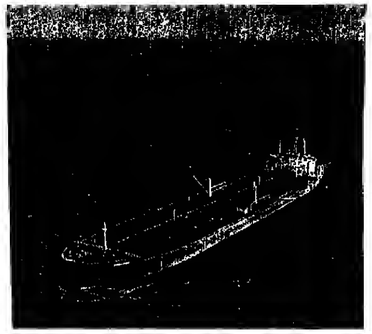

SAUDI CRUDE MOVES OUT: Some analysts doubt that the current OPEC agreement will hold up any better than the previous ones. So far most price increases are paper transactions.

EPA Using Risk Guidelines Despite OMB's Objections

Environmental Protection Agency will continue to use worst-case assumptions to assessing health risks from exposure to hazardous materials, the agency said last week.

An EPA spokesman confirmed that the agency is retaining use of worst-case assumptions over the objections of Office of Management & Budget, which feels the guidelines could exaggerate health risks.

In a letter dated August 12 to EPA administrator Lee Thomas, Wendy Gramm, OMB's administrator of information and regulatory affairs, expressed the concern that "if worst-case assumptions and upper-bound estimates are used and repeatedly combined, they will produce a final risk estimate that is almost certain to overstate the real risk by hundreds of thousands of times."

The new EPA guidelines, expected to be published shortly in the *Federal Register*, will be used by EPA scientists to assess the risk of pollutants in five areas: carcinogenicity, mutagenicity, developmental toxicities, chemical mixtures and exposure.

"These guidelines set forth principles and procedures to guide EPA scientists in assessing risks and to inform agency managers and the public about the nature of our procedures," Mr. Thomas said last week.

"They represent a concerted effort to promote consistency in agency risk assessments and reduce uncertainties in the scientific data base supporting our management of risk," Mr. Thomas added.

The risk assessment guidelines met a generally favorable response from the American Industrial Health Council, an industry group specializing in chronic health issues.

AIHC praised the guidelines for their "flexibility and receptivity to new scientific developments." At the same time, the group called for increased cooperation among scientists from industry, government, academia and labor to insure that as new scientific knowledge in such areas as mechanisms of action, pharmacokinetics and statistical modeling is developed, it is incorporated in the guidelines as quickly as possible.

Ronald A Lang, executive director of AIHC, said last week that the council was still reviewing the science base of the new guidelines, but that, overall, the project represented an "important step in improving the estimation of public health risks."

"We particularly welcome the flexibility provided in these guidelines to enable quick incorporation of new scientific knowledge in assessing the risks of both cancer and other chronic health hazards," Mr. Lang said. "At the same time, a careful reading of the guidelines indicates there still remain some inconsistencies between scientific principles spelled out in the document and the description of how they will actually be applied in practice by the Agency's risk assessors. These need to be addressed in the near future."

"In the very important area involving the statistical modeling to be used in estimating risks, we are pleased that EPA has already undertaken research directed toward developing a biologically-based model, a clear step in the right direction. We hope a high

Continued on Page 26

Carbide Takes Stock Of Divestiture Progress

Union Carbide Corporation continues to sell off assets as a means of reducing its giant debt. In July, the company put its large agricultural chemical unit on the block. That action has been followed by Carbide's announcement last week that it intends to sell its electrical carbon business.

Carbide's massive restructuring has substantially reduced the company's size. Ronald S. Wishart, vice-president for public affairs at Union Carbide recently said that from 1984 to 1986 announced divestitures will reduce company sales over 20 percent to about $6.8 billion, while trimming assets by 27 percent and cutting the head count roughly 50 percent to 58,000.

Speaking at a Societe de Chemie Industrielle, American Section, meeting in New York Mr. Wishart said that after disposing of major business lines like the battery products group and home and auto products business, "we, off its debt, Carbide, will emerge as a more focused, efficient and ultimately more profitable company."

To back this claim up, Mr. Wishart says Carbide posted a second quarter operating profit gain of 27 percent, including a 35 percent surge in operating profits for the Chemicals and Plastics group. Per share income rose 17 percent during the period, he added. On the down side, large interest payments from its stock buyback program last Winter reduced income in the period 46 percent to $55 million, but the company also was able to reduce its domestic debt by slightly more than $1 billion, by using money gained from assets sales. The company's total debt, though, remained well above $4 billion.

Therein lies the rub for financial analysts. Many analysts praised Carbide for its new operating structure and well positioned business lines, but they also expressed concern about the company's debt burden.

One analyst says he recommends Carbide's stock, but adds, "they've got as large a challenge as facing anyone in the industry over the next several years," in managing its debt. He puts this statement into perspective by saying that Carbide will pay about $550 million in interest payments this year, while it posts $810 million in earnings before interest and taxes, a ratio of 1.5 to 1.

This, he says, compares to similar interest

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VOLUME 230
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SEPTEMBER 1, 1986

VCM Rates Rise; Export Sales Grow

A growing worldwide appetite for US vinyl chloride monomer, coupled with a vigorous housing industry at home, has pushed US VCM operating rates to their limit and observers look for more of the same next year.

Recently released production figures compiled by International Trade Commission show a 7.3 percent increase in US VCM output for the first of this year compared to last year. Total output this year, through June, is pegged by ITC at 4.1 billion pounds.

With nameplate capacity at about 8.39 billion pounds annually, US operating rates have been well over 97 percent for the January-through-June period.

The major portion of increased US output has been for sale overseas. Stronger values for the Japanese yen this year have boosted PVC resin sales to that country. This has in turn boosted demand for raw material US VCM to Korea and Taiwan, the major PVC supplier to Japan.

For the first six months of this year US producers have shipped 193 million pounds of VCM to Korea. This is 76 percent higher than last year's rate of export to that country. Taiwan has also been an active customer of US VCM this year. By June Taiwan had already exceeded its total 1985 consumption of US VCM by about 5 million pounds, bringing their total to 54.4 million pounds.

In total US VCM exports, for the first six months of the year are about 295 million pounds ahead of last year's semi-annual mark of 122 million pounds.

According to one US marketer active in the export business, increased exports have not been driven by greater demand in any particular region. "Demand overseas has increased slightly," says the marketer, "but countries with weaker currencies are exporting more to those with strong currencies."

A falling dollar this year relative to the Yen has enabled US marketers to cash in on greater Japanese buying power with raw material VCM sales to Korea and Taiwan.

Of the approximate 260 million pounds of increased production for the first six months of this year, relative to last year, about 90 million pounds went to Korea and Taiwan.

At home, strong housing markets have kept the slack out US sales. According to Department of Commerce, the first seven months of this year have shown a 9 percent increase in construction starts of new homes with an annualized figure of 1.818 million new housing units.

Early forecasts of 5 to 6 percent growth in total VCM for PVC demand will be easily reached, say suppliers. Last year 7.4 billion pounds of VCM went into PVC production.

Housing this year has been fueled by falling interest rates. Next year lending rates are expected to remain low and maintain the current expansion in VCM for PVC.

While the US industry is currently running "all out" increased domestic demand can be siphoned out of export sales. However, high operating rates can still lead to supply crunches.

"When exports are committed two months

Continued on Page 18

VISTA VCM: Detail of Lake Charles facility. US VCM plants have been running close to 100 percent of capacity and should continue to do so next year.

Penco Claims APAP Inroads But Competition Has Doubts

Penco Inc., the Lyndhurst, N.J.-based concern that entered the domestic acetaminophen market last February, says it is making good progress, but the competition says the new group isn't posing much of a problem.

Penco bought its facility from Penick Corporation, which closed its 5-million-pound acetaminophen plant at the end of 1985. Penco says the company is able to increase output to nearly 7 million pounds if necessary.

"We haven't seen (Penco) making any significant impact," says one competitor. "I would've expected them to make more noise than they've made."

A Penco spokesman agrees that the company is still establishing itself, but insists that the company is "pretty much on schedule, or somewhat ahead, in terms of volume and sales."

He adds the company is "pleasantly surprised" by the favorable response of former Penick customers. "Keep in mind, we divorced ourselves from the market. That had forced everyone to make other commitments. (But) I don't think any of our former big customers won't at least consider us" when making buying decisions in the future.

When Penick decided to shut down, it told customers it would produce enough beforehand to supply their requirements through March 1986. Thus, because Penco entered in February, some customers never had to seek material elsewhere and Penco entered with a base. "We have every intention of being a major source in acetaminophen in 1987. We intend to improve our market share," says the spokesman.

Overall, market prices have been stable. The two largest producers, Mallinckrodt Inc. and Monsanto Company carry list prices of $5.95 per pound for powdered and granular material, and $7.55 per pound for direct compression grade. In an effort to be more com-

Continued on Page 22

Olin Corp. Acquires Distribution Firm

Olin Corporation has acquired the assets of Kern Products, a distributor of swimming pool products in Southern California and Arizona, from Katy Industries. The purchase price was not disclosed.

Kern Products distributes a complete line of pool products, including "Sun" pool chemicals made by Olin. Kern has annual sales of $20 million and employs about 100 people.

Peter Koscha, Olin's general manager of pool chemicals, said that the acquisition will provide Olin the opportunity to improve its distribution in the Southern California pool market.

"This acquisition reinforces our commitment to our pool chemical distributor netowkr," he said. "Kern will help us better understand distributor operations and needs and thus enable us to improve our distributor programs. It will also broaden our knowledge of the overall pool water treatment market."

Olin also makes "HTH" and "Pace" swimming pool chemicals.

Leonard J. La Magna, who has been appointed director of purchasing for Emery Chemicals. He will be responsible for all purchasing activities at the division level.

Air Products Process Used in USSR Plant

Air Products & Chemicals, Inc., says that its Houdry Division's "Detol" hydrodealkylation process has been incorporated in a recently completed benzene production facility in the Soviet Union.

The process hydrodealkylates alkyl benzenes and hydrocracks non-aromatics to produce benzene.

The plant in the Soviet Union produces benzene from an impure toluene concentrate.

The plant, which began operating in December, 1985, has achieved its designed production of 120,000 metric tons per year.

Air Products licensed the technology for the benzene plant through Asahi Chemical International, which designed, built, and provided start-up services for the plant on behalf of the Soviet Ministry of Oil Refining & Petrochemical Industries.

The plant is the first of three benzene facilities to be built in the Soviet Union under one contract. All three plants will incorporate the Detol process. The second plant is scheduled to begin operating in summer 1988.

Goodrich Expands Vinyl Compound Unit

B.F. Goodrich Company says it will expand and modernize the vinyl compounding plant in its Geon Vinyl Division's Carson, Cal., facility.

The vinyl compounding expansion will boost capacity at Carson by 50 percent when it is completed at the end of 1987. The company does not reveal capacity figures, a spokesman says.

The Carson plant supplies fabricators of business machine housing, appliance components, vertical blinds, wire and cable insulation, medical devices and other products in the Western US. "Expansion of our Carson facility reinforces our commitment to the growing West Coast vinyl compound market," says James F. George, Goodrich's senior vice president in charge of "Geon" vinyl compounds.

In addition to making vinyl compounds, the Carson plant serves as a distribution center of vinyl resins made at other Goodrich plants.

Cyanamid Barge Struck by Lightning

Lightning struck a barge containing about 50,000 gallons of acrylonitrile at American Cyanamid Company's Fortier plant at Waggaman, La., last Tuesday afternoon (August 26), igniting a blaze that took firefighters two hours to extinguish. No serious injuries have been reported.

According to a Cyanamid spokesman in Waggaman, workers were loading an acrylonitrile shipment onto the barge at the plant dock on the Mississippi River, when a storm moved into the area. Workers suspended loading operations before the lightning struck.

About 36 people were treated and released for eye and throat irritations, and another four people were admitted to an area hospital for observation. They were expected to be released late last week.

Revlon Launches Bid

Revlon Group last week commenced a previously announced tender offer for any and all of the outstanding shares of Frigitronics Inc. at $35.50 per share, or approximately $116 million for the entire company.

Joel D. Litow, who has been appointed vice-president of finance and controller by M&T Chemicals Inc. In this position, he is responsible for all of the company's financial activities. Mr. Litow has been controller since 1979.

BASF and Degussa Slate Venture in US

The partnership between BASF Corporation and Degussa Corporation of which the parent companies are already engaged in a similar venture in Europe for the production of acetal copolymer will be called the Ultraform Company and will be located at the Degussa plant near Mobile. Its polyacetal product is tradenamed "Ultraform."

The new plant is designed for a capacity of 24 million pounds per year. The production of polyacetal, an engineering polymer, is based on an integrated process in which trioxane serves as the principal monomer. Trioxane capacity will be 14 million pounds a year.

The planning of construction and engineering has been completed, according to BASF. The plant is expected to start production in early 1988.

Both Degussa and BASF own patents on polyacetal. Their participation in both the German and the US joint ventures is on a fifty-fifty basis. The German plant came on stream in 1971 and has been expanded a number of times since then.

Big Three Labels Lawsuit 'Frivolous'

Big Three Industries last week called a class action lawsuit against part of its proposed merger agreement with L'Air Liquide SA "frivolous and without merit."

The suit, Morris Kurtz vs. Big Three Industries Inc. et al, was filed August 18 in Harris County, Tex., alleging that Big Three and its directors breached their fiduciary duty to company shareholders by granting an option to American Air Liquide Inc. to purchase approximately 8.7 million shares of Big Three at $24.125 a share.

The suit further charges that American Air Liquide and its parent, L'Air Liquide, aided and abetted the alleged breach of fiduciary duty.

The option was granted in connection with L'Air Liquide's cash tender offer for all Big Three shares at $28 per share. The tender offer was commenced on August 14.

DSM Starts Up A C9 Cracker

DSM recently started up its new C9 resinfeed production facility at Beek, The Netherlands. Nameplate capacity of the new plant is 40,000 MT per year, based on feedstock out of one of the company's two steam crackers.

DSM thinks the high utilization rate of the two crackers and the employment of mainly liquid feedstocks (naphtha and gasoil) will ensure availability of C9 resinfeed.

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Lawrence G. Rawl, who has been named chairman of Exxon Corporation's board of directors, succeeding Clifton C. Garvin, who reaches mandatory retirement age in December.

Thermoplastics Seen Gaining By Bayer Man

Thermoplastics will reach 4.7 million tons in 1990, up from 4.2 million last year and 3.2 million in 1982, according to Bayer AG. In the same time period, the company thinks polyurethanes consumption will jump to 4.5 million tons in 1990 from last year's 3.6 million tons and the 2.9 million tons recorded in 1982.

Bayer's chairman of the board of management, Hermann J. Strenger, told reporters at the company's Leverkusen headquarters in West Germany last week that competition in the market for high-performance polymeric materials is going to get tougher, but he feels Bayer is well positioned to compete in the marketplace. Bayer devoted 40 percent of its plastics research expenditures last year to new products.

In opening remarks at a press preview of Bayer's plans for K-'86, the international plastics show scheduled to open its doors at Duesseldorf in early November, Mr. Strenger said the company's most spectacular exhibit won't appear at the fair at all.

The exhibit is the Ulenbergerstrasse bridge at Dusseldorf, the first road bridge in the world to be reinforced with prestressed rods made of a high-performance composite (Bayer's "polystal") instead of pretensioned steel rods. The bridge opened to traffic in July.

Agent Orange: Payout Plan Stayed by Court

A Federal appeals court last week blocked the distribution of a multi-million-dollar settlement fund to Vietnam veterans exposed to Agent Orange.

The stay was sought by veterans' attorneys, who are opposed to the distribution plan ordered by Federal district court judge Jack B. Weinstein.

Judge Weinstein ruled that the link between Agent Orange and the veterans' various illnesses was tenuous, and that benefit payments should be based on the extent of disability rather than exposure. Plaintiffs' attorneys contend that there is a direct link between the herbicide and the veterans' injuries.

A $180-million out-of-court settlement was reached two years ago by the plaintiffs and seven chemical companies who manufactured Agent Orange. Since that time, the fund has grown with interest to some $225 million.

While disputing the link between Agent Orange and the illnesses suffered by the veterans, the chemical companies said they agreed to settle out of court to avoid the costs of protracted litigation.

S'Fund Tax Increase On Chemical Feeds Doesn't Seem Likely

The chemical industry appears to have convinced legislators that feedstock taxes should not be increased to help finance a new $8.5 billion Federal superfund program approved by a House-Senate conference committee this Summer (CMR 8/4/86, pg. 3).

But so far, even the hint of a consensus has failed to emerge on how Congress should pay for the massive new toxic waste cleanup program, and no date has been set for when a separate conference committee will convene to consider the issue.

"They all left town without determining when they'll get together," a Congressional aide close to the situation said last week. It is anticipated, however, that members of the superfund tax conference will meet shortly after Congress returns from its Labor Day recess.

After the House and Senate passed conflicting superfund bills, two separate conference committees were formed to work out the differences. The program conference, chaired by Rep. John Dingell (D-Mich.), hammered out an agreement on the size and scope of a new superfund bill, and it is now up to the tax conference to figure out how to fund it.

The question of superfund financing took a back seat to tax reform, and "there will be some people who will want to wait until tax reform is through" before taking up superfund, according to a House aide, although it is anticipated that a new superfund program will get though the full House and Senate before Congress adjourns for the Fall elections.

The old superfund law was largely financed by a tax on basic petrochemical feedstocks, amounting to some $300 million a year. The five-year, $1.8-billion program officially expired last September, and has been

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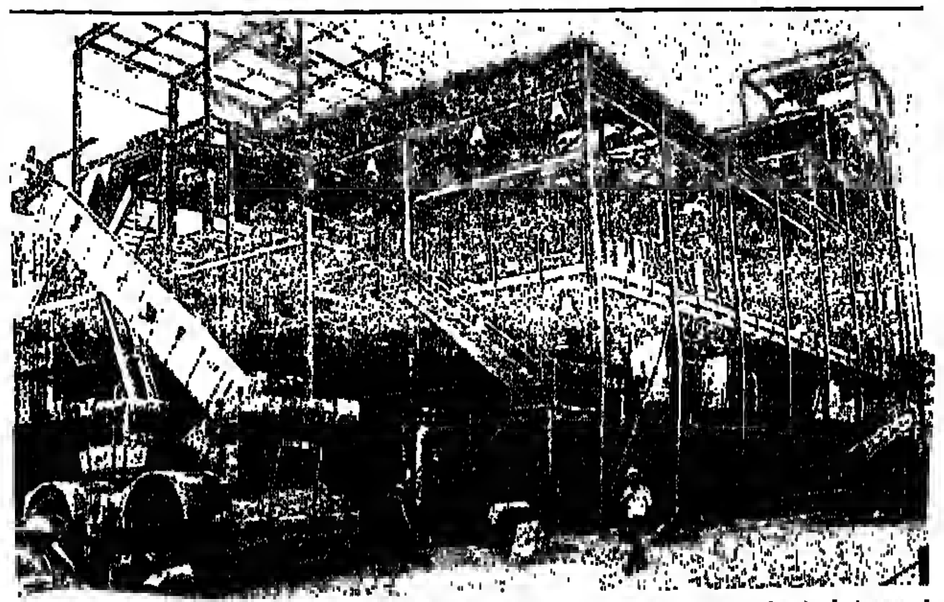

HERCULES CARBOXYMETHYL CELLULOSE: New plant for producing CMC is in the final stages of construction at the Hopewell, VA., plant complex of Hercules Inc. The new unit, which is scheduled to be in full operation by the fourth quarter, will have a 42 million pound a year annual capacity. Hercules is spending about $15 million to improve its CMC facilities, part of a $100 million modernization program for water soluble polymer manufacture at the site.

Chemical Distributors Widen Their Impact on the Market

Industrial chemical distributor sales in the United States are forecast to grow 5.2 percent a year, reaching $12.8 billion in 1990, up from an estimated $9.8 billion in 1985, as measured in constant 1985 dollars, according to a recently completed study by Charles H. Kline & Co., a Fairfield, N.J. market analyst.

Chemical distributor sales are expected to grow more than 50 percent faster than comparable chemical consumption overall. The driving forces behind the greater sales growth by distributors include: producers' consolidating of sales forces and expanding product authorizations to reduce selling costs; producers realizing a greater netback on certain products by selling through distributors; customers' maintaining leaner inventories and requiring shorter delivery times; distributors expanding the services and products offered to better meet customer needs; and distributors' developing higher levels of professionalism.

Other factors likely to directly influence the future of chemical distribution in the United States include: distributor consolidation; entrepreneurial producers; imports; liability insurance cost and availability; and rationalization of domestic manufacturing capacity.

Kline reports that over 1,000 industrial chemical distributors operate in the United States. Although the majority of companies have annual sales of $10 million or less, the leading five firms account for nearly $2.5 billion, or 25 percent of total 1985 industrial chemical distributor sales. Future mergers and acquisitions, as well as companies exiting the business, will result in fewer but larger firms.

Increasingly, chemical producers use distributors not only as a sales channel but as an integral component of their total marketing effort. Although chemical distributors have existed for decades, they have increased in importance during the last ten years, according to the report. In the past, some producers viewed distributors as a necessary evil.

Most producers now view distributors in a positive light — referring to the relationship as a partnership — and consider distributors as a dynamic extension of their sales and marketing group, according to Kline.

Chemical distributors serve a diverse range of end users in more than 25 industries. According to results from the new survey, paints and coatings is the leading end-use industry served by distributors, accounting for over $1 billion or 10 percent of total sales by industrial chemical distributors.

More than one-quarter of the total raw materials consumed in the paints and coatings industry is supplied by distributors. Electronics and pharmaceuticals are two end-use industries forecast to exhibit above-average growth in distributor sales through

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Environment: Solutions Seen at Hand

Solutions to the major industrial environmental problems are readily available, an engineer told the American Institute of Chemical Engineers meeting in Boston last week. Leaking wastes and raw materials, underground storage tanks which haven't been tested for strength and durability, and uninspected hazardous material storage containers are among the most frequent environmental "sins" committed by US Industry.

David I. Brandwein, an engineer with Environmental Risk Limited of Bloomfield, Connecticut, told members of the AIChE that these errors are common to all plants, regardless of size, geographic location or type of industry.

Mr. Brandwein based his conclusions on environmental audits he has conducted at 88 facilities, including general manufacturing and metal-finishing plants, municipal solid waste landfills, wastewater treatment sites and chemical and petroleum operations.

Other problems Mr. Brandwein encountered were incomplete analyses of hazardous wastes generated or stored on site, inappropriate handling and disposal of waste oils and electrical transformers containing polychlorinated biphenyls, inadequate covers for storm drains, and poor groundwater monitoring and hazardous waste contigency programs.

Mr. Brandwein suggested that most of these common problems "are not items requiring capital improvements or costs." In fact, if not corrected, he said, they "could result in more significant costs to the facility than the cost of 'doing it right the first time'."

Often all that is needed, Mr. Brandwein argued, is "additional training or documentation, or new procedures." Company person-

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Dow Study Finds Lower Mortality Among Workers

Dow Chemical says its employees in its Michigan Division and headquarters unit continue to experience lower-than-average mortality rates from all major causes of death, including cancers, although one group of long-term hourly employees had slightly above-average number of deaths due to cancers of the stomach, colon and prostrate.

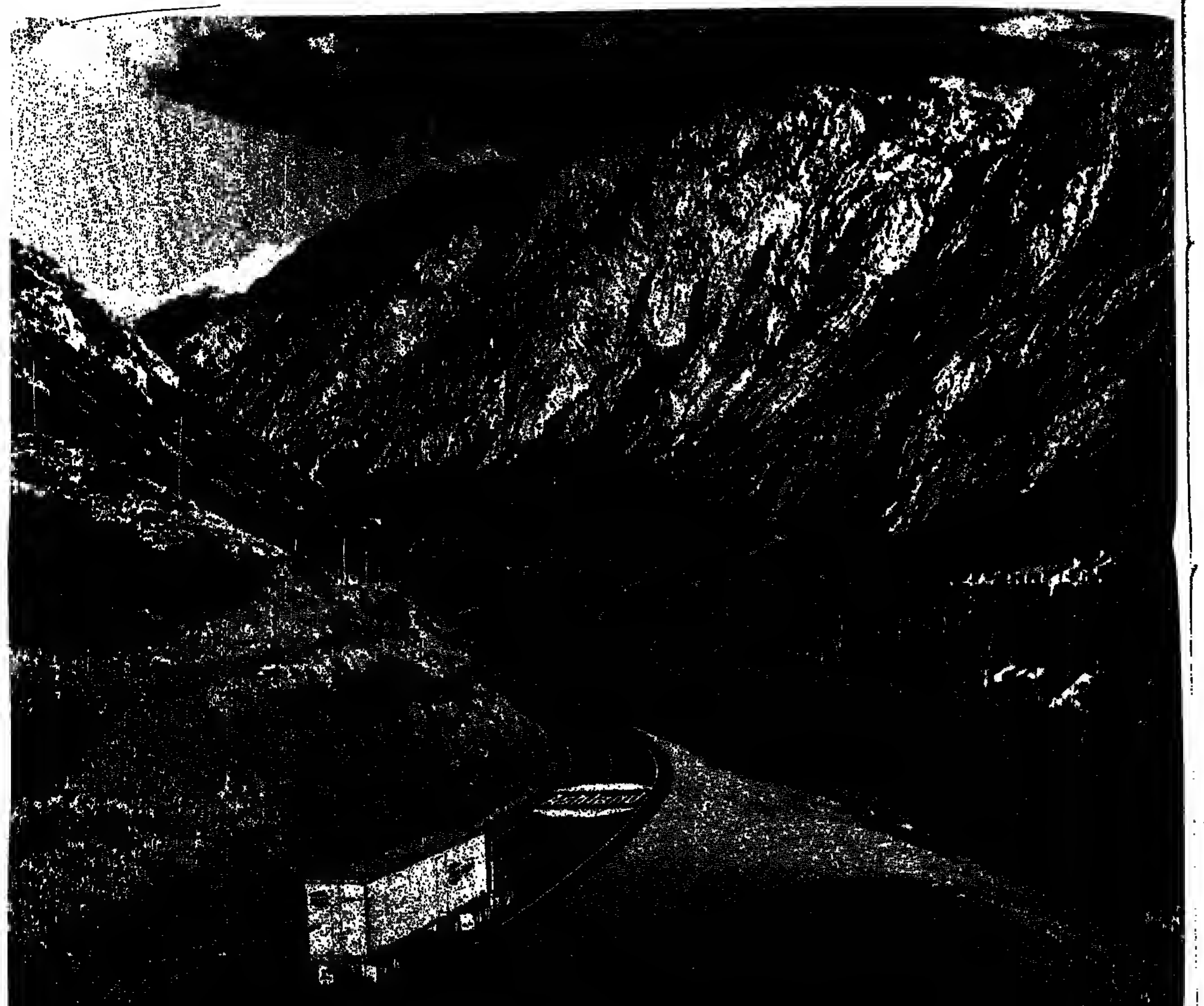
These were the results of an epidemiology program to evaluate the health experience of the company's employees. This particular study, of more than 37,000 men who were employed by the company at the Midland or Bay City sites at some time between 1940 and 1982 expands on an earlier study released in 1983. The earlier study showed that Dow employees had lower mortality rates than the general population.

The most recent study included comparisons between Dow employees and three other groups: male residents of the US, Michigan and a seven-county East-Central Michigan area.

In comparison to the other groups, Dow says, its employees had lower than expected mortality due to each of the major causes of death, including total cancers.

The study found no support for increased mortality from cancers of the brain, pancreas and skin previously reported for some non-Dow petrochemical workers.

A group of 10,000 hourly employees with twenty or more years of Dow service exhibited more than normal fatalities from stomach, colon and prostate cancers. For example, 30 stomach cancers occurred among the Dow workers, whereas 24.4 were expected based on the US population.



Coastal in Catbird Seat?

Coastal Petroleum Corporation's protracted legal battle against seven phosphate firms moves into a new phase in early February, when a trial is scheduled to begin in Federal court in Florida between Coastal and one of the phosphate firms, International Minerals & Chemical Corporation.

At least one analyst thinks IMC would do well to settle the suit out of court, saying defeat for the firm would be financially "devastating."

Indeed, Coastal is seeking $3.5 billion in compensatory damages alone from IMC, plus whatever punitive damages the jury might award. Coastal won't say what it is seeking from the other phosphate companies, including Mobil Corporation, W.R. Grace & Co. and American Cyanamid Company.

Calvert Crary, a litigation analyst at Bear Stearns & Co. in New York, says the "stakes are extraordinarily high" for IMC, adding, "Their position does not look very good."

Mr. Crary points to a May ruling by Florida's supreme court, overturning quiet title deeds of the phosphate companies to land beneath the state's navigable rivers and lakes.

The deeds are challenged by Coastal and the State of Florida. Coastal claims the phosphate firms wrongly removed millions of tons of phosphate from lands leased by Coastal from the state. It will be up to Coastal to prove in Federal court that the waterways in question are navigable.

"You don't have to get an ocean liner up there" to demonstrate navigability," says Bear Stearns' Mr. Crary, who thinks Coastal should shoot for an out-of-court settlement of around $100 million. "Not that much more could be recovered without putting (IMC) in serious jeopardy," according to Mr. Crary.

Coastal declined to comment on what it thought a fair out-of-court settlement would be, but expressed a willingess to negotiate. "From day one," a spokesman says, "Coastal has always indicated it would rather settle than litigate, but thus far, all it has received is the back of the hand."

For its part, IMC has expressed no inclination to settle out of court. "We feel we will be vindicated through the courts," an IMC spokesman said last week.

Plastic Molding Industry Being Sought for Florida

Louisiana State University College of Engineering is seeking support from government and industry to help Louisiana develop an injection-plastic-molding industry in the state.

Such an industry could bring $500 million to Louisiana in five years and $5 billion in 10 years, says Dr. Robert McIlhenny of LSU. Some 30 Louisiana companies are currently producing resins for molding plastics, but the state has only 10 firms that actually mold the plastic.

"What this means is that the state is exporting low-priced raw materials, primarily to northern industrial centers, and importing high-priced finished parts from molding companies.

"If a major molding industry could be developed within Louisiana, the state could convert its raw materials into finished pieces and export them as value-added product," Dr. McIlhenny says.

The LSU engineer heads the LSU Engineering Center for Analysis and Instructional Development. The organization, made possible by a national Control Data Engineering Centers Network program, could foster a plastic molding industry within the state, McIlhenny said.

"But to do that, we need a strong commitment from the state and industry — LSU and Control Data have already made the commitment," said Dr. McIlhenny. He said some $600,000 is needed to provide a stable base for the University-industry program.

"The creation of a center for computer-aided design of molds and computer-integrated engineering of plants has the potential for turning the existing plastics deficit situation around," he said.

Dr. McIlhenny said the result would be that "small start-up industries would be stimulated by the existence of a specialized university research center and that these could then be expected to be followed by relocation of larger company facilities taking advantage of the expertise concentration.

"We are definitely not talking about a cottage industry," said Dr. McIlhenny.

He said in 1985 the total US production of resins was reported to be approximately 47.4 billion pounds, about one-third fabricated into formed plastic parts.

"If a modest price of $3 per pound of finished product is assumed, the total annual sales should approach $60 billion. An aggressive program to bring this industry to Louisiana could result easily in the capture of 10 percent of the market, or $6 billion per year."

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Owens-Corning Seeks Ways to Avoid Takeover

Owens-Corning Fiberglas Corporation says it will undertake a broad restructuring and recapitalization plan in the hopes of discouraging an unsolicited takeover attempt by Wickes Companies.

Wickes has mounted an unfriendly takeover attack against Owens-Corning in recent weeks. the OCF board recently rejected a $2.1 billion, $74-per-share offer from Wickes. To defend against further Wickes offers, the OCF board unanimously approved the restructuring plan last Thursday.

The cornerstone of OCF's restructuring program will be the sale of the company's aerospace and strategic materials group, acquired just last year. OCF says it expects to generate $700 million in cash after taxes by the sale of the aerospace group and other unindentified assets. The company also plans to reduce operating expenses by over $100 million next year, while slashing capital outlays from $220 million to $100 million.

The cash generated by the assets sales will be applied to an elaborate stock repurchase plan authorized by the board. Public stockholders will receive $52 in cash, $35 principal amount of new "Junior Subordinated discount Debentures" and one share of common stock in the recapitilized company.

In addition, OCF says it will raise $1.5 billion in bank financing and $300 million through the sale of senior subordinated debt in order to finance the recapitalization. About $325 million of the company's $518 million in existing debt will remain outstanding. The company will also maintain a $100 million "seasonal line" of cash for general corporate purposes.

William W. Boeschenstein, chairman and chief executive officer at OCF, said in a statement last week, "the board believes that the recapitalization (if approved) is a financially superior alternative to the Wickes tender offer," which he says the board unanimously rejected. A special stockholder

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Sulfuric Acid Mart Weathers A Strike

Despite a strike at Noranda Inc.'s Valleyfield, Quebec, zinc smelter, no serious disruptions have been caused in the Northeast sulfuric acid market. Noranda accounts are now being filled by acid from a number of sources. Observers say tightness in the market has resulted, but that no actual supply shortage exists.

The strike at the Noranda subsidiary, Canadian Electrolytic Zinc, began on or about June 6. While nothing official has been announced, indications are that workers are prepared to return in early September.

Also affecting sulfuric supplies are repairs at a government-run dock that services Noranda's copper smelter at Gaspe, New Brunswick. The repairs have interupted sulfuric shipments since the end of July. The company expects the repairs to be completed by the end of September.

The smelter at Valleyfield produces, on average, about 430,000 metric tons per year of 100 percent acid, according to Noranda. The Gaspe facility makes about 120,000 metric tons per year.

Despite the large amount of acid taken off the market, Noranda says all accounts are being filled, most at the same prices they had been paying. Other industry sources generally agree with this, and say that, likewise, overall market prices have not changed significantly since the strike began.

Noranda accounts are being serviced in a number of different ways. Noranda acid has traditionally been shipped to an Essex Chemical terminal in Baltimore, Md. Since the strike, Noranda has brought from three to five vessel loads of acid from Europe to service that terminal.

Pfizer Inc., a Noranda account at Groton,

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CIL AT SAYREVILLE: The company brought one of its plants back on stream early because of the strike situation. The company acquired the twin facilities from NL some years back.

Pfizer Sugar Substitute Enters FDA's Pipeline

Pfizer, Inc. says it has submitted its entrant to the $1 billion sugar substitute market to Food & Drug Administration for regulatory approval. The sweetener, alitame, is 2,000 times sweeter than sugar, Pfizer says, and has none of the negative side effects linked to aspartame, G.D. Searle & Company's hugely successful sugar substitute.

Pfizer says its filing petition was accepted by FDA on August 21. The company would not project when the food additive would reach the market, but one security analyst noted that based on the experience of other sweetener substitutes, the approval process could take up to five years.

Alitame was discovered by Pfizer scientists at Groton, Conn, in 1979. The compound is a dipeptide-based amide, with the dipeptide portion formed from the amino acids L-aspartic acid and D-alanine. The sweetener differs from aspartame in that it uses D-alanine rather than L-phenylalanine.

High blood levels of phenylalanine have been linked to a condition called phenylketonuria, which when contracted by pregnant women can cause brain damage to the fetus. However this charge has not been conclusively proven.

Pfizer also says alitame has superior stability to aspartame and won't encounter the shelf life problems associated with products containing "NutraSweet," Searle's brandname for aspartame. The company also says alitame's heat stability will enable it to be used in baked goods, which a security analyst calls the sweetener "largest market potential."

Despite these apparent advantages, sources say it will take three to five years before alitame reaches the US market as a table top sweetener. One analyst says the controvesy surrounding cyclamates, saccarin and now aspartame has made sweeten-

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Hazardous Substance List Is Lengthened by EPA

Environmental Protection Agency has announced final reporting levels for 102 additional hazardous substances whose accidental spill or release into the environment must be reported to Federal emergency response authorities.

Under the superfund law, the Comprehensive Environmental Response, Compensation, & Liability Act of 1980 (CERCLA), 717 hazardous substances require reporting to Federal authorities when spilled or released into the environment (air, land, surface water, groundwater) at or above specified levels.

Reporting requirements for all 717 substances at levels specified by CERCLA have been in effect since the law was passed. The latest regulation formally re-establishes or adjusts the reporting requirements for 102 substances.

Spills or releases equal to or above the reportable quantity levels must be reported to the National Response Center. The NRC will notify emergency response coordinators who will then determine what kind of action is necessary to alleviate any threat or potential threat to nearby populations or to the environment.

Under EPA's emergency response program, each of the agency's ten regions maintains emergency response personnel who are on call to respond to oil and hazardous substance emergencies. The US Coast Guard also maintains 12 district offices and other units to respond to oil and hazardous substance emergencies.

The law requires reporting by persons in charge of a facility or vessel from which substances are released into the environment at amounts of one pound or above, with the exception of higher amounts for some substances which were established earlier under the Clean Water Act (CWA) for spills into waterways.

NRC must be notified immediately upon discovery of such a release. If the release has

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News Capsules

NL Shifts Management

NL Industries said last week that Fred W. Montanari, executive vice-president, will become president and chief operating officer of NL Chemicals, succeeding John R. Slowik, who is leaving to pursue other interests, according to NL. The change is effective immediately. NL, effectively under the control of Texas financier Harold C. Simmons, has agreed to seek a buyer for its chemicals business or spin it off to shareholders.

Cal. Biotech Signs Accord

California Biotechnology Inc. has signed letters of intent to form two joint ventures in veterinary therapeutics and related products with Ft. Dodge Laboratories Inc., a subsidiary of American Home Products Corporation. The first venture covers development of products to treat various pet diseases and the second will pursue development of a contraceptive vaccine for animals, mainly dogs and cats.

Ruckelshaus Signs On

William D. Ruckelshaus, former administrator of the Environmental Protection Agency under presidents Nixon and Reagan, has agreed to be the advisor for environmental health issues to the National Safety Council. Mr. Ruckelshaus will serve as a consultant and later will chair the advisory group for an environmental safety and health institute when it is established.

Biogen Venture Set

Organic Plus Company and Natural Systems Company have signed a letter of intent to form a joint venture to produce and market biogen in New Jersey. Biogen is an ingredient used in clinics to prevent baldness and stimulate new hair growth. The new venture, Organic Plus, will construct a 1-million-gallon-per-year plant in New Jersey and will begin production in the second quarter of next year.

Cyanamid & Iowa Agree

American Cyanamid Company and Iowa Limestone Company have completed their agreement for Iowa Limestone to purchase Cyanamid's calcium carbonate deposits, mining and ore processing equipment at Alden, Iowa, and Weeping Water, Neb. Terms of the transaction were not disclosed.

New Software System

Aqua-Tech Inc., Port Washington, Wisc., has introduced an emergency response computer software system, called "Chemdata", designed to provide fast and accurate information for response to chemical spills and emergencies. The system contains information on over 18,000 chemicals and 44,000 synonyms.

'Prowl' Packaging Touted

American Cyanamid Company claims the yellow plastic packaging of its "Prowl" herbicide gives the product an advantage over the competition. The bright yellow, five-gallon high-density polyethylene container "differentiates our product from others," the company contends.

Chevron, ICI In Accord

Chevron Chemical Company and ICI Americas Inc. have reached a tentative agreement to terminate Chevron's rights to distribute paraquate in the US. Chevron's Ortho Agricultural Chemicals Division has marketed the non-selective herbicide here since 1966 as ICI's Ilcesse. ICI Americas has also sold paraquate in the US for the last two years under the trade name "Gramoxone." ICI discovered the product over 25 years ago.

DU PONT IN TEXAS: The company is one of a number expected to benefit most in current climate.

TFI Rebuts Use Of Coal Rates To Figure Prices

Interstate Commerce Commission guidelines to determine rail rate reasonableness for coal shipments should not be applied to non-coal commodities, according to The Fertilizer Institute.

The Institute argued that the use of a stand-alone cost standard — the fundamental concept for coal rate guidelines — is inappropriate for fertilizer movements.

"A competitive access remedy — requiring rail carriers to publish through-routes or joint rates, reciprocal switching charges or terminal trackage rights — is the best means of resolving the captive shipper dilemma," said Institute president Gary D. Myers in comments submitted to the ICC.

As defined by the commission, the standalone standard finds a rate to be reasonable if it falls below a hypothetical rate required to provide comparable service to captive shippers.

The Institute's comments maintained that such a methodology is inappropriate for fertilizer movements.

ICI NH_2 Process To Be Used In PRC Facility

ICI's AMV ammonia process is to be used in a new 1,000-metric-tons-a-day ammonia plant to be built in the People's Republic of China. The project, for the Zhong Yuan Fertilizer Plant at Puyang, Henan Province, attracted bids from the world's major ammonia process companies.

The process, according to the company, is regarded as one of the most energy efficient, costs less to build and is extremely reliable in operation.

Canadian Industries Ltd. built the first plant to use ICI's AMV technology. This 1,120-ton-a-day unit was commissioned in August last year.

The contract to build the new Chinese plant has been won by Uhde of Dortmund, Germany, a licensee of the AMV process, which also engineered the C-I-L plant.

The AMV process was developed by ICI Agricultural Division at Billingham, Cleveland. Bob Coxon, Division Licensing Manager, commented, "We are delighted with the news."

Chemical Income Seen Rising 22 Pct. in 1987

The US chemical industry should increase its operating earnings by 22 percent in 1987 following a projected gain of 35 percent in 1986, according to a study of the industry by analysts at Drexel Burnham Lambert Incorporated. Companies likely to gain most by the strong earnings climate are said to be Imperial Chemical Industries, Ltd., Dow Chemical Company, Air Products & Chemicals, Inc., Rohm and Haas Company and Morton Thiokol Corporation.

At Shearson Lehman Brothers, a subsidiary of American Express Company, analyst Theodore S. Semegran, sees an improving chemical trade balance as the industry's insurance against slackening of economic growth in 1987.

The optimism is based on continued strength in housing, automobiles and other major consumer markets, but on this subject, Henry Kaufman, chief economist at Salomon Brothers, Inc., is warning that the US debt problem — mortgage debt, corporate debt, private debt and national debt — is getting out of hand.

In a talk before a symposium sponsored by the Federal Reserve Bank of Kansas City in Jackson, Wyo., Mr. Kaufman warned that the US financial system will need structural changes and new disciplines "if an economic disruption of major proportions resulting from the debt problem is to be staved off."

Among other recommendations, Mr. Kaufman said that tax policy should favor equity over debt; regulatory bodies should, in some cases, rate the credit of financial institutions; centralized monitoring and regulation of the financial system should be established; reporting of contingent liabilities should be required and financial institutions should have to report their assets cost or market value, whichever is lower.

Mr. Semegran, of Shearson Lehman, said that for the next six months, US chemical companies' earnings will remain strong due to the large energy price drops, favorable foreign currency translation effects and the restructurings that were undertaken in 1985. As the effects of these factors ease in 1987, improved trade "will be the likely savior," Mr. Semegran said.

The tendency this year is for exports to increase, Mr. Semegran comments, and some of the big gainers will be amines, bisphenol-A, terephthalic acid, isopropanol, polypropylene glycol, butyl acrylate and related compounds.

Declining exports and increasing imports of low-density polyethylene this year, the analyst said, probably reflect a developing

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Acids to Aid Butchers

US Department of Agriculture is seeking comments on an interim final rule that will permit the controlled use of substances that maintain the color of fresh pork cuts for the duration of their normal, safe shelf-life. The substances are ascorbic acid, erythorbic acid, citric acid, sodium ascorbate and sodium citrate. The interim final rule becomes effective Sept. 22.

"Fresh pork cuts lose their color long before they become unsafe to eat, and some consumers find the off-color less desirable," said Donald L. Houston, administrator of USDA's Food Safety & Inspection Service. "We have reviewed data which indicate that certain acidic substances can safely be used to extend the color and appearance of fresh pork. In addition, the prescribed conditions under which the substances are permitted will ensure they do not mask signs of food spoilage."

According to Mr. Houston, modern processing technology makes it possible for processors to very precisely control their operations, including the stages where substances are added to meat.

Only processors operating under a USDA-approved partial quality control program will be allowed to use the substances, he said. Under these programs, plants establish controls at certain processing steps. USDA inspectors monitor the plant's controls and data to ensure the process is operating correctly.

Schering Pursues Cases Against Alleged Imitators

In its continuing campaign against manufacturers of generic druge Schering Company last week filed suits against such producers in three states to enjoin them from selling their products with labels that allegedly simulate the Kenilworth, N.J., company's packaging and graphics.

Schering filed the suits to protect its "Afrin" nasal decongestant spray, its "Chlor-Trimeton" and "Polaramine" antihistimines and its "Tinactin" athlete's foot remedy.

A suit against Life Laboratories, Inc., Sun Valley, Calif., involves the alleged simulation of the packaging colors and graphics of "Afrin" and "Tinactin." This suit was filed in District Court for the Northern District of California in San Francisco.

A suit against MY-K Laboratories of Skokie, Ill., formerly known as Bay Laboratories Inc., also involves the label colors and graphics of "Afrin." In addition this suit charges MY-K with infringing Schering's trademark "Polaramine" by the use of the trademark "Bylaramine" for a directly competitive product. The suits against MY-K was filed in the US District Court of Illinois, Rockford Division.

Schering's third suit, against Certified Pharmaceutical Laboratories of Largo, Fla., and Jewett Drug Company of Aberdeen, S.D., involves the simulation of the packaging colors and graphics of "Chlor-Trimeton." It was filed in the US District Court for the Middle District of Florida, in Tampa.

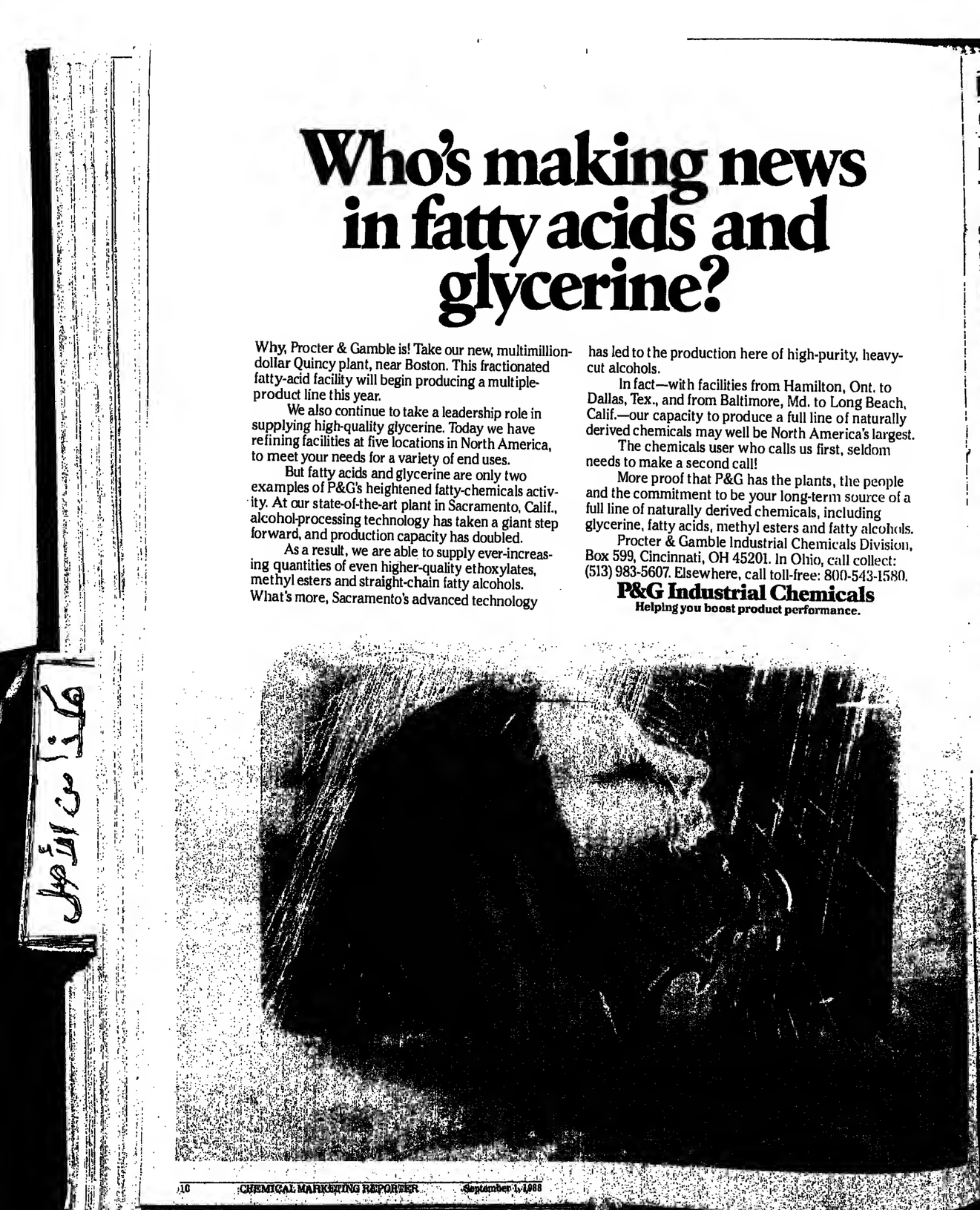
Schering says it is seeking permanent injunctions prohibiting the defendents from continuing to supply their products with packaging that simulates Schering's, from simulating or infringing its trademarks and from "otherwise unfairly competing."

The company is also seeking trable damages, the recovary of the defendants' profits, and awards of attorneys' and legal expenses.

The filing of these suits follows recent consent judgments that Schering obtained against various defendents for label simulation, trademark infringement, falsa and misleading advertising and other acts, many of them involving the company's diet aid "Fiber Trim".

Among the defendants that have signed consant decrees are Thompson Medican Company (New York City); Vita-Fresh Vitamin Company (Garden Grova, Calif.); Fiske Industries Inc. (New City, N.Y.); Great Life Laboratories (Westford, N.J.); NMC Laboratories (Glendaler, N.Y.); Perrigo Company (Allegan, Mich.), Newtron Pharmaceuticals Inc. (Bohemia, N.Y.); Pentex Products Company (Verona, Pa.); Gentex Corporation (Cincinnati, Ohio) and Simpak Corporation (Seattle, Wash.).

A spokeswoman says the company is extremely active in defending its products against these sorts of infringements.



OILS, FATS & WAXES

P&G's Canola Venture Roils The Vegetable Oil Industry

Procter & Gamble's announcement that it is using canola oil in its "Puritan" vegetable oil is focusing industry attention on the low erucic acid variety of rapeseed.

"Every major oil processor in the country is looking at it," says one industry source. The processors have "all got canola in their research facilities," he says.

One of the main reasons for the interest is the oil's low saturated fat content. "Puritan" oil, now 100 percent canola, contains 6 percent saturated fat, according to a Procter & Gamble spokesman. Improved nutritional value was the motivation for the switch from the previous blend of 80 percent sunflowerseed oil and 20 percent soybean oil, the spokesman adds.

Another attractive feature of canola, which was approved for edible use in the US in January of 1986, is that crushing yields 60 percent oil and 40 percent meal, a higher oil yield than that of soybeans.

Canola's use as a fatty acid feedstock has also garnered it attention from people in the chemical business. While looking for a high-yield feedstock last year, one industry source began buying canola oil. He calls the 90 percent stearic feedstock "very desirable" compared to soya in terms of "economics and quality," he says.

HIGH OLEIC SOURCE

Canola is also a sought-after source of high oleic material, according to a trader. His sales of canola to non-food customers are up 100 percent over last year's sales, he claims.

Canadian government subsidies on transportation of the oil to the East and West coasts of the US help make it a competitive alternative to soybean oil. Canola oil, generally priced in the 16 cents to 20 cents range, is "a growing threat," according to a soybean oil processor. In his view, the extent of canola's use in the US will depend largely on the success of a few products made here with the oil, including "Puritan."

Another trader feels that use of canola in the US will not become widespread for "a couple of years," and that the 8 percent duty on the imported oil will keep some customers away.

A major US oilseed processor is currently looking into the possibility of crushing canola for the domestic market as early as next July. The "major impetus" for this "experiment" is, says a source from the processing company, the use of canola oil by Procter & Gamble.

At this point, he says, his company and the rest of the industry are waiting to see how the American public will respond to the oil, and to the claims made for its health benefits, before pressing ahead with plans for crushing. Canola's similarity to linseed makes flax crushing equipment, with slight modifications, ideal for crushing canola, the source says.

Canola is currently grown in the Pacific Northwest and at a few other locations in the US, but not enough to supply the US market's needs. The winter canola that they grow, harvested in the Spring and Summer months, is mostly sold to Canada for crushing.

"Up to now," says Marlene Peters, president of Mid-American Oil Seeds Association, "there hasn't been adequate US demand to justify planting here." She cites the hardships facing US farmers as a deterrent to gambling on growing a new crop without a well-established market to sell to. Some growers believe that if American farmers were to be educated about canola, they would find it an attractive Winter rotation crop.

The sunflowerseed oil industry is keeping a watchful eye on developments in US raising of canola. The sun oil producers were "taken by surprise" by Procter & Gamble's decision to use canola in "Puritan," which had previously been a blend dominated by sunflowerseed oil, according to a sun oil processor.

Although there is concern in the industry over canola's high oleic content, which is a prime selling point of sun oil, producers are confident that the quality of their material is at least as great as that of canola, the source says.

Exports of canola from Canada, the main US source of the oil, almost doubled in the Jan.-May period of 1986 as compared to the same period in 1985.

The total canola exports from Canada to the US for 1985 were 245,238 metric tons (MT), representing 7.8 percent of Canada's total canola exports for that year. The US imported 8,138 MT of canola oil from Canada in the Jan.-May 1986 period. Other major importers of canola include India and Japan.

Canola, Canada's number one source of vegetable oil, is also considered a desirable source of meal, due to its low levels of glucosinolate.

VEGETABLE OILS

COCONUT OIL — Traders last week saw a flurry of high-level trading in the coconut oil market. Traders were at a loss to fully explain the firming in the market beyond say-

PRICES TRENDLINES

WEEK ENDING AUGUST 29, 1986

CHANGES/UP

Soybean oil, Decatur $30 per ton

CHANGES/DOWN

Cottonseed, 41% bulk, Memphis, $7.50 per ton
Cottonseed oil, Valley, 1c. per lb.
Lard, loose, bulk tanks, Chicago dlvd., 1c. per lb.
Palm Oil, ¼c. per lb.
Peanut, 50% bulk, SE, $10 per ton
Peanut oil, Southeast (restricted), 1c. per lb.
Soybean, 44% bulk, Decatur, $7.50 per ton

OILS, FATS INDEX

The Oils, Fats & Waxes Index reflects the prices of 11 representative materials in this sector and the quantity of each produced in 1985.

Aug. 22, 1986	83.06
Aug. 18, 1986	79.60
July 25, 1986	84.54
Aug. 23, 1985	83.98

Chemical Prices Start on Page 34

FRIDAY SPOT PRICES

MARKET CLOSE AUGUST 29, 1986

CRUDE VEGETABLE OILS		
Coconut oil, NY	lb.	.12¼
Coconut oil, Pacific	lb.	NA
Corn oil, Midwest	lb.	.16½
Cottonseed oil, Valley	lb.	.13½
Linseed oil, Minneapolis	lb.	.28
Palm oil, NY	lb.	.11¼
Peanut oil, Southeast (restricted)	lb.	.29nom
Soybean oil, Decatur	lb.	.1360
REFD. VEGETABLE OILS		
Coconut oil, t.w., NY	lb.	.15
Corn, bmbo tanks	lb.	.24½
Cottonseed oil, bmbo tanks, NY	lb.	.2348
Peanut oil, bmbo tanks, NY	lb.	.37nom
Soybean salad oil, NY	lb.	.1803
OILMEALS		
Cottonseed, 14% bulk, Memphis	ton	$117.50
Linseed, extracted, 34% bulk, Fargo	ton	$100
Peanut, 50% bulk, SE, Alabama	ton	$155
Soybean, unrest., 44% bulk, Decatur	ton	$174
FATS & GREASES		
Grease, white, choice, tanks, dlvd., NY	lb.	.9½
Grease, yellow maximum 10% ffa tanks	lb.	.8¼
Lard, loose, bulk tanks, dlvd., Chicago	lb.	.14
Tallow, inedible, fancy, tanks, dlvd., NY	lb.	.10
Tallow, inedible, bch., tanks, dlvd., NY	lb.	.9¼

OILS, FATS & WAXES

ing that it was just one of the occasional "bleeps" that they have seen in the market over the past few months. Covering of short positions probably was involved with the rise, sources say.

After the three day period of heavy activity was over, the market returned to its lower levels, with most of the activity in Dec.-Jan. positions. Buying interest "evaporated" after the brief rise, says a source, who points out that the spot market saw very little activity during the week. Seeing nothing to sustain the market at higher levels, traders remain unconvinced that the market has yet hit bottom.

OLIVE OIL — A measure awaiting Congressional approval would lower the tariffs on olive oil coming into the US, according to a US government trade source. The measure would reduce the duty on containers greater than 40 pounds from 2.6c. per pound to 1.56c. per pound. The duty on olive oil in containers smaller than 40 pounds would be lowered from 3.8c. per pound to 2.28c. per pound.

The proposed move represents an attempt to accommodate the European Community, with whom the US has been having trade difficulties involving US citrus and European Community pasta, according to Foreign Agriculture Service.

The measure is expected to win approval when Congress re-convenes after its current break.

The reduction would lower the high spot prices that traders are seeing now, sources say. The current price is being called $8 per gallon for Spanish Riviera and Virgin grades, and $5.35 per gallon for Italian B material.

The market is very quiet right now, with stiff prices not expected to change until after August, a primary holiday time in Spain.

PEANUT OIL — Recent raios in the Southeast improved the outlook for the current peanut crop. Traders are now thinking of the crop reduction as considerably less serious than they had been before. They are now comfortable with the USDA's estimates of a 15 percent reduction from last year's crop, rather than figures nearly twice that they had been fearing, sources say.

Perhaps partly because of this, trading on peanut oil has been very slow. Prices have also softened, and are apparently continuing to do so, as buyers are staying away from the material at the asking levels.

The lack of any significant export trade, adequate supplies, and increased buyer confidence in availability are all helping to soften the market. "Prices won't soar like people thought they would," says a source, who notes that although the rains may have come too late for some of the crop, traders are remaining optimistic about the nuts that

OILS, FATS & WAXES

will begin coming to market in two to three weeks.

SOYBEAN OIL — Traders were pleased to see a pickup in foreign buying interest, as importers abroad continue trying to use up their Commodities Credit Corporation credits before the end of September.

Bangladesh has been tendering on 8,000 tons of crude de-gummed soybean oil in barrels, industry sources say. Originally, Bangladesh's interest in soy oil "came on the heels" of a PL 480 sale to Haiti, a source says. The US government put Bangladesh on hold until now to prevent the soybean oil market from getting too tight, according to an industry source.

The Dominican Republican is also said to be coming in for a purchase in the near future.

At home, soy oil is seeing very little activity, as the crush continues to be meal-driven.

A remark by Agriculture Secretary Lyng regarding off-grade soybeans being held by the government softened the market as crushers expected the material to go to the market sometime soon, a source says.

FATS & GREASES

TALLOW — The tallow market is experiencing a pickup in orders from foreign buyers anxious to use up their Commodities Credit Corporation credits before the September 30 deadline, sources say.

West Coast traders have been finding an increase in Korean buying, and other parts of the US are stepping up shipments to Europe in response to their heightened demand, according to industry sources.

It had been hoped that Egypt would order a large quantity of US material last week, but the Egyptians have delayed their decision until at least this week, a source says. They are said to be planning to purchase 25,000 tons of material, but it is not certain if they will decide to buy tallow or coconut oil.

Domestically, tallow availability is tight, partly because the chemical business has been buying steadily lately, and is expected to continue doing so, sources say.

In response to this and to the improvement in export activity, sellers raised their prices last week. They are said to be having a hard time finding customers to buy at the higher levels, though, and probably will not be able to maintain the higher prices in the face of a weak vegetable oils market.

AROMATIC ORGANICS

Maleic Anhydride Market Called Fairly Snug by Analysts

Following an "unusual" first half of the year for maleic anhydride, producers say that healthy domestic demand is keeping the market fairly snug.

Ashland Chemical Company experienced difficulties with a reactor early in the year that resulted in some loss of production from its 80-million-pound-per-year facility in Neal, W.Va. "We ran the other reactor heavily," and drew down inventories, says a company spokesman, in order to meet delivery schedules.

USS Chemicals, a divison of U.S. Diversified Group, lost output from its 33-million-pound-par-year facility in Neville Island, Pa. for approximately ten weeks following a fire April 11. The company worked off inventory and "made arrangements to supply customers," according to a company spokesman.

He says the outage "was very untimely...(as it) came at the height of the market's demand." This reflected the seasonal upturn in the agricultural chemicals sector; demand from the other major end markets is said to be considerably less seasonal.

With the production problems in the industry during the first half of the year, says a producer, "inventories began to dwindle a little bit. Producers are still running full out to replenish inventories," but this is no easy task given healthy demand and seasonal turnarounds such as that taken by Monsanto Company's 170-million-pound-per-yer Pensacola, Fla. facility for the month of August and Denka Chemical Corporation's 50-million-pound-per-year plant in Houston during July.

MALEIC SUPPLY SNUG

"Nobody has run out of maleic, but it has been snug," says a producer. Demand for polyester resins, which accounts for about half the market, was approximately 2 percent stronger during the first half of the year compared with the same period of 1985, according to Society of Plastics Industry. This rate would lead to a demand growth of about 4 million pounds annually.

Producers agree that the polyester resin business has been reasonably healthy and that the smaller, more mature end markets — lube oil additives, fumaric acid, and agricultural chemicals — have been holding steady. Producers see polyester resin demand continuing to grow at a GNP-style pace, or slightly higher, for the forseeable future.

However, this growth has been more than offset this year by a fallback to export levels. Last year, when Monsanto's plant in Wales U.K. underwent a catalyst change, the company's Pensacola, Fla., facility boosted its shipments to Europe. With the Wales plant back this year, the US export level is expected to be only about half last year's 27 million pounds.

Producers say they have observed no real effects of the US dollar's weakening on export interest, and expect the export level to be flat for the next couple years. Main markets are said to be Canada, Latin America, Southeast Asia, and Australia.

Monsanto's curtailment of exports, USS's outage, and Ashland's operational difficulty are seen as contributors to an 8 million pound decline in production, from 181 million pounds during the first half of 1985 to 173 million pounds during the first half of 1986, according to International Trade Commission.

Producers say that list pricing is at 53 cents per pound. Market prices are said to have been holding steady in recent months, with discounts of between 5 and 10 percent off list. Producers acknowledge that feedstock butane costs have been weak, but observe that from the late 1970's until the mid-1980's, the maleic anhydride business was not a profitable endeavor.

With demand projected to exceed current capacity by 1990, expansion plans are in evidence. Denka says it will be on-stream with an additional 20 million pounds per year during the first quarter of 1987, and Monsanto plans to add 40 million pounds per year by early 1988. USS Chemicals says it is "looking at ways to optimize our business," and Ashland says its plant is capable of being expanded and the situation is under evaluation.

Producers note that Standard Oil Company has shown an interest in using maleic anhydride for 1,4-butanediol production that could bear fruit in two to three years.

PRICE HIGHLIGHTS

AROMATICS IN AUGUST

		CONTRACT (US $)	SPOT (US $)
Aniline	lb.	.33-35½	.34-.35
Benzene	gal.	.70-.75	.69-.77
Cumene	lb.	.13¼-.13¾	.13¼-.13½
Cyclohexane	gal.	.???	NA
Phenol	lb.	.22	16½
Styrene	lb.	.16	.17-.17½
Toluene	gal.	.67-.73	.60-.67
Xylenes, mixed	gal.	.80	.75-.81

BTX — Exxon Chemical Americas and Shell Chemical reportedly are raising benzene contract pricing 5c. per gallon, to 90c. per gallon, effective September 1. While most other suppliers are believed to be following the upward adjustment, Standard Oil is raising its contract pricing by 10c. per gallon, to 85c. per gallon.

A Standard Oil spokesman says that, because the company "does not agree with a twice-a-month adjustment" policy, it has "taken the bull by the horns" and made its posting based on an assessment of the strength in the benzene marketplace.

A contributing factor in the decision, the Standard Oil spokesman says, is the company's hydrodealkylation (HDA) capacity at its Lima, Ohio and Alliance, La., facilities. At the present time, industry sources say, no merchant HDA units are in operation.

Standard Oil's HDA potential is being evaluated, the company spokesman says, while observing that "HDA economics are still not validated at 80c. per gallon." A trader comments that 85c. per gallon "is the kind of number you need for HDA."

Spot benzene is said to be in a firm 76c. to 77c. per gallon range, while spot toluene is quoted between 88c. and 87c. per gallon. Crude oil and gasoline prices are strong, and these are providing much of the upward pressure on basic aromatics pricing, industry sources say. In addition, it is observed that octane enhancer demand in Europe has been strong enough to draw toluene and MTBE shipments from the US.

Spot xylene is quoted at 72c. per gallon, and the market is described as thin. Paraxylene contract pricing is said to be holding steady at 19.5c. per pound. Orthoxylene contract pricing has firmed up during the past couple months to between 13c. and 13½c. per pound.

CUMENE — Contract pricing, quoted between 13¼c. and 13½c. per pound in August, will likely be firming up to the 14c. per gallon level in September in response to higher benzene prices, producers say.

"Cumene prices have been fairly low — (and) we have been seeing fairly good phenol demand," one producer comments. Another producer says that, in addition to domestic demand, inquiries have been received recently from Eastern Europe. According to Bureau of Census, the amount of cumene exported in June was the largest since January 1985.

CYCLOHEXANE — In response to the 5c.-per-gallon benzene contract increase, cyclohexane pricing moved up 4.125c. per gallon

AROMATICS

in accordance with the industrywide pricing formula. Prices range from Phillips Chemical Company's 93.8450c.-per-gallon price to Texaco Chemical Company's 92.6450c.-per-gallon price.

DYES — Food & Drug Administration says it intends this Fall to permanently list Yellow 6, Red 8, and Red 9 as safe for use in externally applied drugs and cosmetics. A provisional listing will be in effect until October 6.

PHTHALIC ANHYDRIDE — BASF Corporation says it is presently starting up its flaking and bagging system adjacent to the company's 175-million-pound-per-year molten phthalic anhydride plant in Kearny, N.J.

BASF has been supplying flaked material to the East Coast market from its Cornwall, Canada facility. USS Chemicals, a division of U.S. Diversified Group, supplies the market from its Neville Island, Pa. facility, which flakes material brought in from a 210-million-pound unit in Pasadena, Tex.

The Kearny startup "certainly will increase the competition," observes a USS Chemicals spokesman, who sees the facility as effectively replacing Monsanto Company's 60-million-pound unit in Bridgeport, N.J., which was closed in January.

A BASF spokesman says that "we had a very minor position" in the East Coast market while bringing in material from Canada, and "we are now looking at a much more extensive position." The company says that the ability to maintain inventory locally will improve the logistics of its operation.

In addition to USS Chemical's presence, BASF will need to contend with imported product. "The East Coast has been plagued by cheap imports," says the USS Chemical spokesman, which have come from such countries as Brazil and Venezuela.

Imports during 1985 totalled approximately 12 million pounds, and took 14 percent of the US flake market. Through the first six months of 1986, imports totaled approximately 9 million pounds for an estimated 21 percent share of the US flake market.

Nonetheless, it is observed that the volume of imports has tailed off recently, attributed to strong demand from the Far East and the devaluation of the US dollar. According to Bureau of Census figures, the amount of material imported during May and June combined was 1.270 million pounds, while the average import level for the first four months of the year was 1.949 million pounds.

STYRENE — Amoco Chemicals says that it is removing a 1c. per pound temporary voluntary allowance from its list pricing, effective September 1. The new price is 21c. per pound, f.o.b. Texas City, Tex., with higher prices from other shipping points. Other producers have raised prices by 2c. to 3c. per pound.

Pfizer Sugar

Continued from Page 7

ers "an extraordinarily hot topic." He says the burden of proof on Pfizer to prove alitame's safety and efficacy is "enormous." He concludes that the product has "a lot of potential," but it will "take a long, long time" to get through the approval process.

Alitame is hitting the regulatory pipeline at a time when competition in the sugar substitute market is soon to heat up. Aspartame's current hold on the market is very strong ($750 million in sales, compared to under $100 million for saccharin), but several observers say cyclamates may re-enter the market next year, 17 years after the FDA banned them.

In addition, another sugar substitute that was submitted for FDA approval in 1982 continues to move through the approval process. The sweetener, called acesulfame k, was developed by Hoechst AG and is already marketed in several Western Europe countries.

Pfizer says alitame's stability will enable it to be used "in a wide variety of foods, including beverages and baked goods." The company says alitame can also be used in toiletries and pharmaceuticals.

S' Fund Tax Increase

Continued from Page 5

held together since then through interim financing.

While the chemical industry has supported reauthorization of superfund, Chemical Manufacturers Association, the industry's trade group in Washington, has urged Congress not to increase feedstock taxes beyond past levels. CMA appears to have succeeded.

"I think there's a pretty good understanding in Congress that petrochemical feedstocks can't take much more," says Tom Gilroy, a CMA spokesman. "Thay just look at Texaa and Loulaiana where moat of the tax is collected. It's not a healthy aegment of the industry."

A staff membar of the tax-writing Housa Ways & Means Committee credits CMA with doing a "good sale" on the feedstock tax issue, agreeing that feed taxes will probably be frozen at past levals. Howaver, ahe says there is no consensus on even a broad outline of how the naw cleanup program should be funded.

CMA supports some aort of broad-based tax to pay for waste-site clesnups, but that issue is "still up in the air," the Wsys & Means staffer says, as is agreement on some sort of wasta end tax. "That'a just as controversial" the aide observca. The House bill contained a waste end tax, while the senate bill includeda broad based tax.

The Reagan Administration, meanwhile, has threntened to vclo any superfund bill containing a broad-bssed tax or a "substantial" increase in feedstock and petroleum taxes. Thia position has raised concera bell in the chemical and petroleum industries.

The Raagan Administration haa constantly oppoaed a broad-bssed superfund tax. In the Spring of last year, wheo the Senate Finance Committee was considering various broad-based tax schemes to finance an expanded superfund, the Tressury Departmen teatified that it would rather seesn expanded superfund program finsnced by higher feedstock prices than a broad-based tax (CMR 4/29/85, pg. 3).

Chemical Earnings Rising

Continued from Page 9

shortage of LDPE in the US rather thán declining competitiveness of US producers. A similar trend in polyvinyl chloride could also be the result of limited capacity, he comments.

Drexel Burnham Lambert's chemical team — William R. Young, Katharine L. Plourde, Brian J. Corvese and Charles A. LoCastro — are forecasting real growth of 3.2 percent in the US GNP next year with a slight bulge in the fourth quarter.

The Drexel Burnham projection for chemical industry reveoue growth in the current yesr is 3.4 percent, with physical volume expected to grow sbout 5 percent, while selling prices decline by no more than 1.5 percent. Operating earnings are expected to be up 35 percant, versus a previous forecast by the team of 24 percent for the yesr.

EXPORT VOLUMES

The Drexel Burnhsm Lambert team also ia expecting the industry to increaae its export volumes and reduce imports. Other expected stimulants to esrnings include a pick-up in capitsl spending, a steadying of the oil price somewhere in the mid- to upper teens, a continuing stesdy treod in fixed costs, along with better supply/demsod balances. An industry operating rate in the vicinity of 85 percent is forecsst by the aoalysts for 1987.

The four snalysts remain optimisttc on the outlook for industrial chemicals, "for which capacity reductions have become a way of life in recent years, and for the major thermoplastics, smong which tightneas in avsilsibility will be most evident in the polyethylenes and polypropylenes."

Man-made fiber gains, however, are aeen limited by continuiog imports of tcxtiles and apparel and by the upcoming drop in cotton prices, "which could discourage the uae of polyester and other man-made yaro gooda."

Prospects for the industrial gas manufacturers are said to remain healthy despite a recent wave of announcements of proposed new capacity.

"Demand and operating rates for the importsnt merchant gases continue to trend upward, approaching the 'sold-out' 85 percent opersting rate domestically," the analysts aald.

In the absence of a recession, the nat additions to merchant industrial gas capscity likely to come on stream during the next two years "should be absorbed by the expected demand growth for these products in the same timc period," the Drexel Burnham Lambert snalysts atated.

The herbicide outlook is said to be good for those companies which are commercialitzing value-added products. The prospects are aald to be beat for American Cyanamid Company'a "Scepter," Dow Chemical's "Tandem," Du Pont Company's "Classic," "Du Pont's "Assure," Dow's "Verdict," and Imperian Chemical's "Reflex."

Losses in market share are expected for Rohm and Haas' "Blazer," BASF Corporation'a "Basogran," Du Pont's "Lexone," Bayer Chemical'a "Sencor," and Monsanto Company's "Lasso."

In the specialty chemicals area, Drexel Burnham Lambert expects the best gains to be registered by Pall Corporation, Avery International, Inc., and the specialty operations of Morton Thiokol. Equities of all three companies are rated "buy" as are thoae of the previously mentioned companies.

ALIPHATIC ORGANICS

VCM Rates Rise

Continued from Paga 3

In advance," says one producer, "planning problems can be created." "On a long term basis the industry is not over committed but, on a short term basis, there are problems."

In addition, occasional operating problems are exaggarated undar such high production rates. Earlier this year B.F. Goodrich reportedly declared a force majeure when an unexpected ona week shutdown at its billion-pound-per-year La Porte, Tex., facility forced it to fall below eupply obligations.

While damand bas been etrong, selling prices hava been off about one to two cents per pound from first quarter levels. Current settlements for July are at about 15 cents per pound. Export prices, aided by weak dollar values, are currently about half-a-cent higher than domestic settlements.

BRAKE FLUIDS — Dow Chemical U.S. says it will increaee the off-list prices of its brake fluids by 25c. per gallon October 1. The increase affects all bulk and private label packaged brake fluids.

Major components of these propriatary blends are glycol ather higbers and glycols.

Current bulk list prices include \$4.90 per gallon for "BF brake fluid 470," \$5.40 per gallon for "BF brake fluid 920." \$4.40 for "BF brake fluid 1000," and \$5.20 per gallon for "Brake Fluid HD-50-4.

The above price ara f.o.b. Freeport, Texas, freigbt equalized. Drummed quantities are 60c. per gallon bigher.

BUTADIENE — Butadiene prices, continuing their year-long slide, lost about one half cent per pound during August. Selling levels have reacbed as low as 12½c. per pound according to industry sources. Says one producer, "one would have thought that 13c. per pound was the bottom, but I've seen apot quotes below that."

Soma marketers feel that tbe rapid decline in butadiena prices this year may have been aided by the popularity of MTBE in octane improvment and a "reaeonably strong" gasoline demand this Summer. "People may be moving butadiane in order to maka isobutylena for MTBE," says one producer.

However, with crude oil pricas ehowing renewed strength, September may be a watershed month for butadiena. One producer explains tbat consumers have, so far, been quick to point out that tbe decline in crude oil prices sbould be passed along in the prica of butadiene. "Whan (oil) prices come up in September buyers won't be abla to do that," eays the source.

However, any increase in butadiene, motiviated by higher oil prices, will be preceded by a "lag time" of at least 30 days according to producers.

EPOXY PRECURSORS — Dow Chemical U.S.A. says that it will raise the list price of its apichlorhydrin and allyl cbloride by 3 cents and 6 cents per pound respectively on October 1. Epichlorhydrin will list for 89c. per pound on an f.o.b. basis. Allyl chloride will list for 71c. per pound. Dow will eliminate f.o.b. pricing on allyl cbloride after October 1 and will eell the material on a delivered basis.

A Dow spokesman says tbat the price increases are needed in order too boost returns on the producta, which bave not seen a price increase for two and a half years. While Dow saya that diecounting is "not too widespread," it hopes that this move will replenish mergins lost to recent price cutting.

Shell Chemical Company and Dow are the only domestic producers of epichlorhydrin and allyl chloride. Dow has a 420-million-pound-per-year unit at Freeport, Tex. and Shell owns a 220-million-pound-per-year plant in Deer Park, Tex.

As of press time lost week, Shell had no comment on Dow's price change.

EDTA — Dow Chemical U.S.A. says it will increase prices on all grade of its "Versene 100" plating agents by 3c. per pound on October 1. New prices will not exceed current list levels of 36.5c. per pound in bulk and 42.5c. per pound in drume. The above prices are f.o.b. Freaport, Texas, freight equalized.

ETHANOL — While sales of fuel ethanol showed only modest growth in July, prices ehowed a gain of 9c. per gallon on average over June valucs, according to Information Resources Inc. Strong premium gasoline demand, aided by lower prices and media promotions, according to IRI, have boosted demand for octane and made ethanol more attractive. During July there was a 14c per gallon eprcad in fuel etbanol prices with 9?c par gallon being the low point in Baltimore.

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PRICES TRENDLINES

WEEK ENDING AUG. 29, 1986

CHANGES/UP
None

CHANGES/DOWN
None

ALIPHATICS INDEX

Tha Aliphatic Organics Index reflects tha pricea of 20 raprasentative materials in this aector and tha quantity of each produced in 1985.

Aug. 29, 1988	222.80
Aug. 22, 1988	222.80
Aug. 1, 1988	222.80
Aug. 30, 1985	203.80

Chemical Prices Start on Page 34

ALIPHATIC ORGANIC OUTPUT: 2ND QTR. 1986

US INTERNATIONAL TRADE COMMISSION NUMBERS IN POUNDS.

		2nd Qtr. 1986	1st Half 1986	1st Half 1985
Acetic acid	lbs.	787,353	1,424,160	1,361,[illegible]
Acetone	lbs.	484,433	963,596	869,3[illegible]
Acrylonitrile	lbs.	147,629	266,215	249,511
n-Butanol	lbs.	218,444	412,466	334,[illegible]
Butadiene (rubber grade)	lbs.	680,178	1,369,043	1,246,6[illegible]
Carbon tetrachloride	lbs.	188,781	303,096	370,[illegible]
Chloroform	lbs.	118,630	203,131	—
Ethanolamines (mono, di and tri)	lbs.	132,562	277,993	264,2[illegible]
Ethyl acetate (85 percent)	lbs.	54,288	96,403	100,7[illegible]
Ethylene	lbs.	6,081,043	18,114,964	15,174,[illegible]
Ethylene glycol, mono.	lbs.	1,088,465	2,318,507	2,207,[illegible]
Ethylene glycol, monoethylether	lbs.	70,483	144,661	137,2[illegible]
Ethylene oxide	lbs.	1,400,480	2,921,040	[illegible]
2-Ethylhexanol	lbs.	138,178	266,041	[illegible]
Fluorocarbons 11 and 12	lbs.	152,402	283,607	[illegible]
Formaldehyde (37 percent by weight)	lbs.	1,537,070	3,048,202	[illegible]
Isopropyl alcohol	lbs.	318,230	641,[illegible]	[illegible]
Methanol	lbs.	1,523,123	3,007,[illegible]	[illegible]
Methyl chloride	lbs.	101,353	213,[illegible]	[illegible]
Methylene chloride	lbs.	130,653	278,[illegible]	[illegible]
Methyl ethyl ketone	lbs.	127,860	294,[illegible]	[illegible]
Pentaerythritol	lbs.	31,664	58,[illegible]	[illegible]
Perchloroethylene	lbs.	109,k508	205,[illegible]	[illegible]
Propylene (chemical and polymer grades)	lbs.	3,799,035	7,627,[illegible]	[illegible]
Propylene (other)	lbs.	379,854	761,[illegible]	[illegible]
Propylene glycol	lbs.	186,562	298,[illegible]	[illegible]
1,1,1-Trichloroethane	lbs.	154,053	509,[illegible]	[illegible]
Tetrachloroethylene	lbs.	109,606	205,[illegible]	[illegible]
Vinyl acetate monomer	lbs.	594,254	1,110,214	[illegible]
Vinyl chloride monomer	lbs.	2,061,026	4,069,852	[illegible]

COATINGS & PLASTICS

Continued from Page 33

that a succeasful price increase should enable them to maintain these high operating rates.

PRIME PIGMENTS

CADMIUM PIGMENTS — So far, only one other domestic producer of cadmium red and yellow pigments haa followed Harshaw-Filtrol Partnership's move to increase list and selling prices.

SCM Pigments Division has announced that it will raise prices for its "Cadmolith" cadmium lithopone and pure cadmium reds and yellows by an average of 2 percent, effective September 15, 1988.

Prices for maximum volumes (ordera of one ton and over) of representative products follow:

Yellow 300 "primrose yellow" will sell for $3.03, Orange 340 "medium orange" for $4.05, and Red 200 "light red" for $5.37. In its "Modern" series, "Hi-brite yellow 600," "primrose Hi Brite" will sell for $3.03 per pound, orange "640 medium High-brite" for $4.05 per pound and red 201 "flame red," for $5.37 per pound.

A spokesman for the firm explains that increased labor, raw material and operating costs have necessitated the increase.

Effectiva July 28, Harshaw-Filtrol increased selling prices for its cadmium sulfide, sulfosalinide and lithopone pigments by an average of 2 percent.

Use of these pigments in specialty engineering polymere and alloys is said to be growing; demand is expected to reach 8 million pounds this year (CMR, 8/11/88 p. 30).

Ciba-Geigy, Johnson Matthey, Ferro Corp., the remaining 20 US producers havo elected not to raise prices.

PLASTICS MATERIALS

EPOXY RESINS — Dow Chemical Company will be raising list prices for epoxy resins and their precursors (see Aliphatics Market) effective October 1, company sources report.

List prices for its "D.E.R." liquid resin products 300 series, will be moved up 4c. per pound, and those for its standard solid 600 series by 3c. per pound. Brominated solution grades will be moved up 3c. per pound, and mixed solid/solution grade prices will be increased by varying amounts, depending on volume and grade. Prices for powder coating grades will not be affected.

A company spokesman says the price move is an attempt to regain margins lost to discounting, prevalant in the market for the past year.

While producers have realized some savings from lower hydrocarbon costs earlier this year, he continues, selling prices had deteriorated more than raw material costs. This increase should partially restore epoxy prices to more realistic levels, he adds.

Selling prices for liquid grades beve been steble since June, producera report, ranging around $1.37 per pound; those for solid grades, however, have slipped somewhat, moving from a range of $1.33 to $1.46 per pound to from $1.31 to $1.37 per pound. Discounts are said to remain at June's levels.

Producers provide different pictures of demand this year. In 1985, the market shrank from 376 to 361 million pounds. One source expects demand to grow by 4 percent this yenr, led by the nerospece end market demand. Another source disagrees, predicting that domestic demand will fell from 2 to 3 percent this year; nil end merkets should continue ot lost ycor's levels, this source feels, except for contings, which he expects to fall by 3 percent.

Imports, never significent in this market, are expected to become even less so, given the weeker US dollar.

Capacity utilization rates, hard to come by in this market, are "guessed" by one source to be in the 70 percent renge; no additional capacities or expansions have been brought on line to date in the commodity epoxy segment. Dow expanded its line of specialty electronic grade "Quatex" epoxies in July.

POLYETHYLENE — All remaining major domestic producers of high density polyethylene have joined in last week's price increase move led by U.S.I. Inc., E.I. du Pont de Nemours Inc., Enron Chemicals (formerly Norchem) and American Hoechst Inc.

Allied Chemical Corporation, Amoco Chemicals Company Inc., Dow Chemical USA, Chevron Chemicals Inc. and Soltex Polymer Corporation will be moving latest selling prices for their full lines of HDPE resins up 4c. per pound effective October 1, 1988.

Spokesmen for the firms feel that the higher prices will help restore profitability to the market, to ensure that supply keeps up with a growing demand, and to enable the firms to continue research and development programs.

POLYSTYRENE — The Dow Chemical Company has formally announced that it will relae selling prices for its "Styron" general purpose and high impact solid polystyrene resins by 3c. per pound effective October 1. List prices will not be affected; neither will those for ignition-resistant grades.

Mobil Chemical and Americen Petrofina have announced similar increases informally, on an individual customer basis.

The increaae follows July's 3 to 4c. per pound increase, which was fully demand driven end described by producers as largely successful.

Other producera hava not yet decided whether to go along with tha increase, but all describe an atmosphere of extremely strong demend, coupled with higher feedstock and production costs.

ALIPHATICS

Continued from Page 18

Md. and $1.08 per gollon tha high end in Franklin, Ky. The Baltimora price is up 1c. per gallon ovar June while the Franklin price is 11c. per gallon higher than June levels in that area.

With the imminent expiretion of lead credits, distillers are hopeful thet ethanol sales may return to their strong growth mode of 1985. In July, total gasohol sales were 69 million gallons, only 10 million gallons over the previous month. IRI says that octane is "extremely scarce." BTX suppliers concur and call aromatic octena components "tight." IRI maintains thet incremental octane is tight and explains, "the finishing capacity of tha nation's refiners, including hydrocrackers, isomerization units end reformers, are running near 100 percent — each anxious to process tha inexpensive crude oil which is availabla on tha world oil market."

Ethanol may be out of its doldrums at this point, according to IRI, as the prices of other octane enhancers risé they see an [illegible] incentiva by refiners to reevalua[illegible] ethanol options.

METHYL ETHYL KETONE — Celanese Chemical Company says it will increase the market price of its methyl ethyl ketone by 3c. per pound across the board on October 1. The company hopes to bring market prices up from a current range of 23-25c. per pound. Celanese list price will be revised. The current 34c. per pound price, which includes a 2c. per pound TVA, will be replaced with a 32c. per pound list price.

Carbide Takes Stock

Continued from Page 3

to earnings before interest and taxes ratios of 3 to 1 for Dow and 4 to 1 for Monsanto. The significance of this ratio, he continues, is that in the case of a general business downturn, earnings for Carbide could quickly drop to the level of interest payments, severely restricting the company's cash flow.

In his eneiysis, the compeny "needs to get $1 billion in essets sold quickly" in order to further reduce the debt and lower interest payments.

Carbida has, in fact, announced plans to divest another $1 billion in essets, including the agricultural products unit, which Mr. Wishart said will be closed by early next year. The company's plan calls for debt to be reduced to $3 billion by the end of 1987.

Analysts have generally hed a positive reaction to most of the business lines Carbide has chosen to retain. The Chemicals & Plastic group, the Industriel Gas Division, and the Specialties and Services group heve all been called solid performera. Only the smallest operating unit, Cerbon Products, has come into criticism due to its close ties to the sputtering steel industry.

Chemicals & Plestics has seles of $3.8 billion, 55 percent of Cerbide's total, and is the leading ethylene glycol producer in the world, and with Unipol, e mejor force in the linear low density and high density polyethylene industries. The Industrial gas division, Linde, is the largest such producer in the world, Mr. Wishert said, with a 18 percent share of the world market (32 percent in US) and $1.6 billion in sales. Tbe Specialties and Services unit bas seles of $800 million.

Mr. Wishert elso emphasizes the "critical" need for Carbide end the industry at large to generate trust end goodwill between chemical plants end the public, especially local communities. "Chamophobia," he says, has become so advanced that the industry faces a tough challenge to educete and convince the public that production and transportation of chemicels is being handled responsibly.

He seys this challenge can be met, though, by improving lines of communication between the plants and the community and by providing the public with a better understanding of whet "goes on inside the fence." Being "a good neigbbor is the number one mission" in the industry, he added.

Union Cerbide says it will "conduct business reviews with selected potentiel buyers" of its electrical carbon business later in September. The business is comprised of a range of carbon-based specialty products for industry. Most of the products are sold under the "National" trademark. These include cerbon brushes, carbons and other cerbon and graphita products. Tha electrical carbon business has operations in Fostoria, Ohio, Greenville, S.C., Parma, Ohio, Toronto, Caneda, Juarez, Mexico, and Sheffield, Great Britain.

THERMOPLASTICS

BULK PRICES IN AUGUST 1988

	AUGUST (US$)	JULY (US$)
Polyethylene-LD,linar.....lb.	.26-.30	.26-.30
Polyethylene-HD, injection ..lb.	.25-.28	.23-.27
Polyethylene-LLD*.....lb.	.26-.30	.25-.29
Polypropylene, molding .....lb.	.32-.38	.31-.35
Polystyrene, g.p. .....lb.	.34-.35	.34-.37
Polyvinyl chloride, pipe .....lb.	.28-.50	.29-.50

*Butene-1 comonomer.

DRUGS & FINE CHEMICALS

Penco Claims APAP

Continued from Page 4

patitive, Penco sells its material for less. Penco's spokesman won't specify powdered or granular price, but says it charges $5.95 per pound only for small quantities. The company charges between $7.40 and $7.50 per pound for its direct compression grades.

European imports are said to be competitive with the domestic product, but Chinese and Turkish material costs less. However, as is the case with many products, many believe the quality of Chinese and Turkish material is not as high as that of the domestic material.

Despite this, one importer of Chinese material calls demand "healthy," and says his company's powdered and granular prices are $1.25 to $1.50 less per pound than the domestic producers' prices.

Importers and domestic sources agree that imports are making inroads into the US market. The first half of 1986 saw 3.25 million pounds of acetaminophen enter the US, more than 50 percent higher than the total for the comparable period in 1985. One domestic producer says this is "obviously of concern," because the weakening dollar has not slowed the imports. However, domestic sources say the import pressure is not enough to cause list price reductions. Imports are said to total about 20 percent of the US market, up from 15 to 17 percent in recent years.

DEMAND IS GROWING

Demand is growing for domestic companies as well. Mallinckrodt recently announced a capacity increase to 22 million pounds, up from 17.6 million pounds. Monsanto's capacity is 15 million pounds. While sources claim growth, no particular market segment is cited.

Acetaminophen players benefitted slightly from the decision of Johnson & Johnson and other tablet manufacturers to stop making capsules in favor of elongated tablets called caplets. However, increased demand was primarily in the form of brief surges in the beginning.

"Certainly there were some surges (in demand), but now demand has leveled," says one producer. Another domestic producer comments that the transition from capsules to caplets was "very slow," but agrees that there were some surges.

Penco, which entered the market when these decisions were being made, says its timing wasn't such that it could take full advantage of the situation. "I don't think it hurt us...It just narrowed our opportunity for business," says Penco's spokesman.

Meanwhile, as Penco attempts to make further inroads against Mallinckrodt and Monsanto, the industry awaits more news about Celanese's decision to enter the acetaminophen market by 1988.

In June, 1985, Celanese announced that it would begin commercial production of acetaminophen after developing a new process which it feels will allow the company to become the world's lowest cost producer of the product.

A Celanese spokesman says there has been no change in the company's plan, and that it is hoping to begin production on schedule. Some domestic sources, however, have doubts that Celanese will actually enter the market.

One producer says if Celanese plans to enter by 1988, it is time to become more public and to start making commitments. This producer says he has heard nothing since the initial announcement.

Likewise, another producer says, "I don't really think (Celanese) will ever get into acetaminophen." He says that all three existing producers have spent much time researching acetaminophen production, and does not understand how Celanese can make it for less and still make money. He adds that he was "dumbfounded" by Celanese's announced plan because he doubts there is enough money to be made to make the venture worthwhile for a company the size of Celanese.

ADJUVANTS — RIBI ImmunoChem Research, Inc., claims that its adjuvants, substances that improve response to vaccines, are being vastly improved. A spokesman says the "new breed" of adjuvants is helping researchers in developing systems for vaccines which may offer protection against diseases such as AIDS, hepatitis, herpes, meningitis and pneumonia.

Advances in biotechnology and genetic engineering are said to have spurred the new vaccines. Nils A. Ribi, president and chief operating officer of RIBI, says there are essentially three steps until the products, introduced in January, are immersed in the marketplace. First, the adjuvants are being used now in research study. Much of the research is being done by pharmaceutical and biotechnology companies. Second, the adjuvants will have to break into the veterinary marketplace. This is described as a challenge by Mr. Ribi, because vaccine prices in this area are so low, it will be difficult to be cost-effective. Third, the product will have to be readied for human use. Mr. Ribi notes that an AIDS adjuvant is taking priority over most of the other diseases, mainly because of its importance to the public.

A spokesman says new adjuvants would replace older vaccines developed over the past 50 years. A problem with the current vaccines, he continues, is that while they have been successful in combatting smallpox, polio and measles, they can cause harmful side effects, such as redness, swelling and even shock.

RIBI explains that most existing vaccines are usually prepared from non-virulent whole organisms or from components of the organism. New vaccines use only small portions of the various bacterial or viral cells. However, while these are safer, some are not effective enough to stimulate stong immune responses. Therefore, reasons RIBI, there is a growing need for adjuvants that can exploit the full potential of these vaccines.

RIBI is attempting to meet this need via the RIBI Adjuvant Systems (RAS). Mr. Ribi says this is an improvement over the standard research adjuvant. Complete Freund's Adjuvant, because it contains two percent oil content, while the latter consists of killed whole tubercule bacilli with a 50 percent oil, and is unsuitable for human and many animal uses. Mr. Ribi says that by substituting the whole tubercule bacilli with reduced oil and non-toxic components, RAS is safer.

Mr. Ribi adds that encouraging results have been seen in developing cancer vaccines, but that this research is in its infancy.

ANTI-INFLAMMATORY STEROIDS — Phamatec, Inc. and Nova Pharmaceutical Corporation have reached an agreement allowing Nova to become exclusive worldwide marketer for Pharmatec's "Carrier," developed for use with drugs to treat brain tumors and anti-inflammatory steroids to treat brain inflammation.

Pharmatec says that by using its "Carrier," delivery of anti-cancer agents like

PRICES TRENDLINES

WEEK ENDING AUG. 29, 1986

CHANGES/UP
None

CHANGES/DOWN
None

DRUGS INDEX

The Drugs & Fine Chemicals Index reflects the prices of 10 representative materials in this sector and the quantity of each produced in 1985.

Aug. 29, 1986	211.16
Aug. 22, 1986	211.16
July 28, 1986	211.16
Aug. 28, 1985	211.16

Chemical Prices Start on Page 34

DRUGS & FINE CHEMS

chlorambucil and nitrosources to the brain will be made easier. Primary and metastatic brain cancer cannot always be treated by drugs alone. Spokesmen for Pharmatec and Nova say the product is still being researched, and one notes the companies are hoping to begin clinical trials in 1987, and to be marketing "Carrier" by the early 1990's.

Under the agreement, Nova pays Pharmatec to synthesize two Carrier/drug combinations to treat brain inflammation and at least two "Carrier"/steroid combinations to treat brain inflammations. Pharmatec will also conduct animal studies to study brain delivery. Nova is funding development costs and clinical trials. According to a spokesman, Pharmatec will be able to manufacture the products for Nova under certain conditions of the agreement.

D-CALCIUM PANTOTHENATE — BASF Corporation is raising the price of its USP-grade d-calcium pantothenate to $12.50 per kilogram, effective September 2. This is a one-dollar per kilogram increase over its previous price.

BASF raised its d-cal pan price as recently as late May. That was also a one-dollar-per-kilogram increase (CMR, 5/26/86, pg. 18). BASF is said to be initiating this price increase and no other d-cal-pan spokesmen have announced similar increases yet.

The spokesman says that the increase is a further attempt to raise prices to normal levels, after a depressed period. Also, he says that supplies are currently very tight because the feed side has seen an increase in demand. He continues that demand on the USP side has been stable.

Other B-vitamins are still firming, says the spokesman, although the list price has not been changed for any of them recently. As for d-cal-pan, he anticipates further increase, but adds the price should not change during the remainder of 1986.

GLUCOAMYLASE — Enzyme Technology Corporation is raising its glucoamylase spot prices by about 15 percent, effective immediately. ETC is a wholly-owned subsidiary of Great Lakes Chemical Corporation.

The spot bulk price for "Zymetec" GA-200 is now $3 per liter for fuel ethanol grade and $3.50 per liter for food grade. Truckload quantities packaged in drums are 10c. per liter higher. Terms are net 30 days, f.o.b., Terre Haute, Ind. Contractual prices will remain the same for the rest of 1986.

Crude Oil's Effect

Continued from Page 3

prices yet. In addition, heating oil stocks in Europe are very high at present, sharply curtailing the need for crude in Western Europe.

Another important factor in world oil prices,sources says, are non-OPEC members who depend heavily on oil sales for hard cash. Mr. James notes that while Mexico and the Soviet Union have paid lip service to following OPEC's production cutback policy, both countries' need for oil revenues may quickly send them into the market with added volume at lower prices.

Several other analysts have taken a "seeing is believing" stance towards OPEC's steadfastness. Patrick Baggett, vice-president of Chemical Marketing Associates, Inc., has taken the position that "until we see some lengthy period of constraint (on the part of OPEC members to maintain their quotas), it is more than likely the price of crude oil will fail rather than increase."

Having said that though, Mr. Baggett, like most other analysts, directly attributes the current round of petrochemical price increases to higher crude values. Mr. Baggett attributes the current price firming to many oil dealers and traders who were caught short of material in early Summer and had to scramble in July and August to cover their positions. This, combined with speculation that the OPEC agreement would drive prices up, has led to the current run-up, he says.

Naturally, benzena was the first petrochemical to respond to the reversal of crude's lengthy price slide this Winter and Spring. Hugh Pylant, project manager at Pace Consultants in Houston, says spot benzene prices have firmed from 85 cents to 88 cents per gallon on August 1 to 78 cents last week. Toluene also followed upwards, moving from 57 cents to 80 cents a gallon on August 1 to 86 cents to 68 cents per gallon last week. Contract prices for benzene were raised 5 cents per gallon September 1 to reflect these higher levels.

Another observer notes that the spiral in benzene prices will continue at least through September. Leonard Boyd, president of Enex, Inc., a Houston consulting firm, says the benzene price increases are reacting to crude oil price firming in July. Crude gains posted in August, he notes, will not be reflected in higher benzene values until a month later. He says that for each $1 barrel adjustment in crude oil prices (up or down) benzene values change 3.8 cents per gallon.

For example, he says if the price of crude paid by the refiner reached $15 per barrel, then benzene prices will reach 88 cents per gallon. If, as some speculate, crude prices climb to $18 to $20 per barrel, benzene would rise to 98 cents to $1.07 per gallon. And as Mr. Boyd points out, benzene's demand position is having no impact on pricing; the increases are coming about entirely due to cost pushes from crude oil.

Styrene manufacturers were among the first chemical intermediate producers to tag cost increases as a reason to hike prices. After a year of dismal returns on styrene, the producers posted 3 cents per pound price increases for September 1, a boost that strong operating rates at the plant may help in passing the increase. Two other major benzene derivatives cumene and cyclohexane were also hiked in price September 1.

A second cost-push on styrene is the 2 cent per pound ethylene price increase launched September 1. Ethylene itself came under strong cost pressure last month when the price of two feedstocks, gas oil and naptha rose sharply as a result of higher crude prices. Gas oil prices rose nearly 10 cents per gallon and naptha prices shot up 9 cents per gallon during a two week period in August alone.

The September 1 ethylene price hike follows a similar increase that failed in July. Producers are seeking a selling price of 16½ cents per pound. Mr. Pylant says the high price of ethane, which has become relatively scarce, coupled with the rising price of heavy feedstocks prompted the ethylene hike. In addition, the high use of heavy feedstocks has sharply boosted the supply of co-products propylene and butadiene, both of which have been priced extremely low, further straining olefin makers margins.

Ethylene producers are helped by a very snug supply-demand balance. One analyst estimates that the industry is operating at over 90 percent of on-line capacity. Supplies have been further constrained at this time by turnarounds of several major producers such as Dow, Exxon, and Shell. One producer says that if the industry exercises "discipline," the increase should stick. In addition to posting the ethylene price hike, several olefin makers have also boosted propylene selling prices 1 cent per pound.

Low density polyethylene makers moved right away to hike prices after ethylene price increases were announced. One analyst says LDPE price increases of 5 cents per pound were largely cost driven, but he also notes that demand is strong and the industry is operating at high capacity.

Plastic prices have been very weak for the past year, sources note, and any increase in raw materials costs will be quickly followed by polymer price hikes. For polymer makers, one analyst says, oil price increases represent a chance for polymer makers to justify hiking prices, a task which has gotten very difficult since the crude slide last winter. The failed July 1 ethylene price hike, he notes, stymied an effort by PE producers to boost selling levels. In the current equation, he says, if ethylene prices increase 2 cents per pounds PE prices should rise 3 cents per pound.

In addition to these products, analysts project that many more petrochemicals and plastics will be raised in price October 1, but only if the current crude oil price rally sustains itself. Mr. Baggett of CMAI says, though, that if the OPEC accord disintegrates, or a non-member producer boosts supply, crude prices could quickly slip back under $13 per barrel, enough of a decline, he says, to wipe out the price gains made by most petrochemical producers.

Hazardous Substance

Continued from Page 7

occurred within a plant facility, the reporting requirement applies at the moment a person in charge has knowledge that a release of a reportable quantity of a substance leaves that facility, even if the environmental release occurs through the air venting process.

The adjustments of the final reporting levels for 102 hazardous substances include lowering the reporting levels of 30 chemicals, raising the reporting levels of 38 chemicals and formally leaving 34 at the original reporting levels. Of these 102 hazardous substances, reporting levels for 63 substances were originally established under the CWA.

The reporting levels are determined on the basis of a substance's tendency to ignite, to react with other substances, to cause acute and chronic health effects and potential to cause cancer. In addition, the agency considers the substance's likelihood to form more hazardous products in relation with other substances or to degrade into less harmful components in sunlight and in water, reducing immediate and potential threats.

On April 4, 1985, EPA set final reporting levels for 340 of the 717 substances. The remaining 275 substances are still being assessed for potential carcinogenicity and chronic toxicity for future adjustment, if necessary.

Chemical Distributors

Continued from Page 5

1990. Two primary factors contributing to the higher growth are the faster overall growth of these industries and the increasing focus placed on these industries by distributors.

The new Kline survey is a comprehensive analysis of the U.S. chemical distribution business based on over 300 interviews with distributors, producers, end users, and other trade factors. The survey profiles the businesses of 126 chemicals distributors and provides a thorough analysis of the business dynamics and driving forces for growth. In addition, ten end-use industries are analyzed in terms of their use of distributors. The report is available on a subscription basis from C. H. Kline & Co., Inc., 330 Passaic Avenue, Fairfield, N.J. 07006 or Kline S.A., Rue Froissart 89, B-1040 Brussels, Belgium.

Plastic Molding

Continued from Page 7

Experts in the plastics industry predict that by 1995 the cubic volume of plastics produced in the US will exceed that of steel. They also estimate a five-fold increase in the use of engineering thermoplastics at the expense of die-cast metal within the next five years, he went on.

"The industry is in a strong growth mode, but industry perception nationwide is that the state's existing molded-plastics plants are resistant to modernization, a situation favorable to start-up companies using the latest design and manufacturing technology," Mr. McIlhenny says.

Need a Quick Study? Chemical Profiles

Environmental Solutions Available

Continued from Page 5

nel should ba taught *to look* for these errors, aomathing not practiced now because "its not part of their job to notica, or they are too familiar with the facility and fail to see problems which othera...will see."

Development of apecial safety training programs for plant personnal, formalized emergency plans and inspection procedures, proper labeling of stored hazardous wastes, and the use of spill pans in loading and unloading areas were among the solutions ha proposed.

Mr. Brandwein made bis presentation based on a paper he wrote with Gordon T. Brookman, also of Environmental Risk Limited.

Another researcher reported that Biological treatment, using bacteria, could prove to be the most effective way of removing polychlorinated biphenyls from New England's Housatonic River. But, according to Bryce I. MacDonald, manager of environmental issues for General Electric in Fairfield, Connecticut, until this technology is parfected, restricting the down-river flow of PCB's should be the focus of clean-up efforts.

Mr. MacDonald cited transport of PCB's as a crucial issua because of the river's flow pattern. From its source in Massacbusetts, where the greatest number of PCB's are concentrated, the Housatonic runs through Connecticut and into the Long Island Sound. While sections of the river in Massacbusetts are not used extensivaly for recreation, the presence of PCB's in the Connecticut stretch threatens "one of the best trout rivers in New England," Mr. MacDonald said. He added that Connacticut's goal of using the Housatonic "as a fully devaloped recreation reaource" is alao in jeopardy.

Phyaical removal of the PCB's posea a problem, according to Mr. MacDonald, because available technologies, such as aedimeot removal or rechannelling, are expensive or would have a substsotial impact oo the envirooment.

On tha other baod, he proposed, biological treatment may be the key to long-range PCB clean-up efforts sioca bacteria can work affectively underwster with little or no negative impact on tha aurrounding area. Ha cited studiss conducted in the Hudson Rivar and in Illinois' Weukegan Herbor where becterie were found to detoxify PCB'a.

Mr. McDonald informed attendees that Generel Electric's leboretory haa "isolated and charactarizad two dozen bactarial strains capable of biodegreding PCB'a..." However, be believes "lerga scela application is some yeara awey."

In the meantime, Mr. MacDonald suggested thet restrictiog tha flow of PCB'a down-river, using dems as aediment treps, could help minimiza the problem. He described an experimeot underwey oear Woods Pond, Mess., thet is closing off the by-pass on a dam in an effort to keep the compound from flowing further down-straem.

Since the greatest concaotration of PCB's is just north of this region, tbe sediment trap could reduce overall transport of PCB's into Connecticut end Long Island Sound.

In enother presentation to tbe meeting, e researcher seid thet advances in biotechnology mey revitalize tbe paper industry. Declining profits due to rising costs for wood, chemicals, energy, labor and pollution-control equipment have characterized the US pulp and paper industry in recent years.

E. Michael Egan, an executive with Repligen, Inc. in Cambridge, *Mass.*, said that researchers have isolated a group of enzymes which can improve the economics, efficiency and environmental effects of pulping processes.

Traditional pulping relies on chemical and mechanical processes that "bave various handicaps which include high energy consumption, damage to...fibers, low yields, corrosion end environmental nuisance," Mr. Egan said. He reported that the new group of enzymes compare favorably on all these acores.

The enzymes have been isolated from the white rot fungus, which occurs naturally in forests. Now produced on a laboratory-scale using ganetically-engineered bacteria, Egan believes industrial-scale production will become possible with further research.

"If available in sufficient quantity, these enzymaa could be used to carry out many of the reactions in pulp processing operations," Mr. Egan remarked. He added that "ultimately, it may be possible to produce high quality, color-stable pulp in high yield using processes predominantly based on enzyme technology."

EPA Guidelines

Continued from Page 3

priority will be given to continuing to develop and validate alternative methods to the presently used and somewhat simplistic linearized, multistage model," he went on.

"We alao hope the important National Academy of Sciences workahop oo pharmacokinetics, acheduled in October, will expand the use of pharmecokinetic data in assessing risks and that the output of that 'state-of-the-science' review will quickly be incorporated in these guidelinea. We are pleased that AIHC has been able to join with EPA and the National Institute of Environmental Health Sciences in cosponsoring this important scientific meeting."

PERFUMES & FLAVORINGS

Natural Menthol Imports Rise Due to Tariffs and Contracts

Natural menthol imports surged from 68,357 pounds in May to 422,909 pounds in June. The June amount is nearly half of the January through June, 1985, imports, which totalled 652,793 pounds. Prices, however, have remained stable at $6 per pound.

The buying spree was a carryover from the 1985 import climate, when, according to one importer, "China was unable to meet its commitments in terms of shipping dates, causing a shortfall of material." The consumer reaction was to secure longer-term contracts in the event of a future shortage, and to buy a larger percentage of Brazilian menthol. As a result, from April 1, 1965 to March 31, 1986 Brazilian imports accounted for 53 percent of the American market, making it ineligible for preferred status, says this same importer. Thus the import increase was due to buyers beating the July 1 reinstatement of Brazil's US tariff.

This long-term contracts provide incentive to the brokers, says an importer, because "they can then fulfill their remaining obligations at a lower price." The market itself remains unaffected: "The market is quite stable, not fluctuating more than 5 percent either way for the last year."

One trade source suggests that heavy rains in China would reduce the harvest by knocking the leaves from the stems, but an importer familiar with domestic and foreign mint crops rejects this. "As long as the crop is planted it will be distilled. Rains do not affect the harvest more than a few percentage points every year."

DIFFERENCE OF OPINION

The difference between the Chinese and Brazilian menthols is entirely one of opinion. The Brazilian enjoys a traditional clientele. "The majority of my customers prefer the Brazilian because they've been buying it since the fifties," says an importor. But a broker says there's a qualitative differance: "The Brazilian is not nearly as nice as the Chinese menthol; the Chinese is composed of long, beautiful cryatals."

According to one source, synthetic menthol competition has tightened considerably: "The manufacturers have fixed production costs and since prices have dropped by nearly a third from $20 per kilo to $14 per kilo in the last year, it's more difficult to make a profit." He contends the natural menthol producing countries have an advantage. "When dealing with natural costs, labor is the issue. Brazil and China's natural costs are lower."

US import tariffs play a big role in the synthetic industry. The tariff on Japanese material is 3 percent while the Japanese tariff on imports is 37 percent, according to one trade source. Mexico obtained the preferred status, and now controls over half of the US menthol market, yet "their status remains, they still don't pay any duties," claims a manufacturer. "The Mexicans can now buy material abroad, reexport it to the US, and still beat the going price."

US consumption of menthol is broken down by tobacco products, 45 percent, toothpaste and other over the counter products, 40 percent, and other products, 15 percent. "Menthol is a very mature market," says an analyst, "and the tobacco industry claims the total number of cigarette smokers is decreasing."

SEEDS & SPICES

LAUREL LEAVES — Laurel leaf prices have not up over 138 percent in the last two weeks from 80c. per pound for Turkish semi-select to $1.90. The same assumption behind the oregano price jumps, radioactive contamination of the 1986 crop, is responsible for the Laurel leaf situation.

"Rumour has it that the 1966 harvest is going bad," says one importer. The outlook is worsened, he says, by a poor 1965 crop: "Last year's crop was so small they're asking astronomical prices for what's left."

A lack of hard avidence is proving frustrating to the industry. "No testing has been done to determine the quality of the crop," says a broker, "but we know that Turkey can't ship it."

PEPPER — White pepper recorded its largest jump in price this week since early April, from $2.45 per pound to $2.78. Reports that the Brazilian white pepper crop will be reduced from 6,000 to 1,500 pounds fueled the increase.

In addition to Brazil's decision, on importer says, the European demand has increased: "The major market for white pepper is in Europe and the buying climate there has become more active." A broker suggests that prices were held down in anticipation of this activity. "White papper may have been held steady because the producers were waiting for the European demand."

The impact of the Brazilian reduction is timely, coming just before its harvest of September and October. Indonesia's white crop harvest ended in June, according to one source, leaving only the more flexible Malaysian growers an opportunity to adjust.

Black pepper prices continued to climb with Brazilian, Lampong, and Malabar all rising 5c. per pound. The market strength is reportedly due to increasing demand.

SAGE — The prices of Albanian and Turkish sage increased last week for the first time since late February. Albanian sage went up 10c. to $1.45 per pound and Turkish limited sage rose from 15c. to 20c. to $1.10 to $1.10 per pound. Dalmatian prime sage followed with a 5c. per pound increase from $1.80 to $1.85, presumably in response to its competitors' price hikes.

An importer suggests the same hesitancy in the oregano market applies to the Albanian and Turkish sage. "As long as there is some doubt over the ability to distribute sage on the US market, buyers will pay more to be reassured."

PRICES TRENDLINES

WEEK ENDING AUG. 29, 1986

CHANGES/UP

Annatto Seed, Dominican, 3c. per lb.
Annatto Seed, Indian limited, 5c. per lb.
Annatto Seed, Kenyan, 2c. per lb.
Caraway Seed, Dutch, 3c. per lb.
Chillies, Indian, 2c. per lb.
Dill Weed, Egyptian, 10c. per lb.
Fennel Seed, Egyptian, 4c. per lb.
Geranium Oil, Egyptian, $2 per lb.
Laurel Leaves, Turkish, semi-select, fancy, 45c. per lb.
Nutmeg Oil, $1 per kilo
Nutmegs, E.I. Whole, 5c. per lb.
Nutmegs, E.I. Reconditioned delivered, 3-18c. per lb.
Oregano, Greek/Turkish, 20c. per lb.
Poppy Seed, Dutch, 4c. per lb.
Poppy Seed, Turkish, 13c. per lb.
Poppy Seed, Australian, 5c. per lb.
Sage, Dalmatian Prime, 5c. per lb.
Thyme, Spanish, 3-5c. per lb.
Thyme, French, 2c. per lb.
Vetivert Oil, Haitian, $3.50 per kilo

CHANGES/DOWN

Cardamoms, Indian bleached, 50c. per lb.
Clove Leaf Oil, Madagascar, $2.50 per kilo
Cumin Seed, Turkish, 3c. per lb.
Geranium Oil, Chinese, $3.00 per kilo
Ginger Oil, Indian, $2.00 per kilo

PERFUMES INDEX

The Perfumes & Flevorings Index reflects the prices of 11 rapresentative materials in this sector and the quantity of each supplied in 1985.

Aug. 29, 1986	71.00
Aug. 22, 1986	71.00
Aug. 1, 1966	71.00
Aug. 26, 1985	71.00

Chemical Prices Start on Page 34.

Chemical Finance

Mesa Partnership Offering Preference A Units

Mesa Limited Partnership has filed a registration statement covering an offering of up to 23 million Prefarence A units. The partnership also announced that it intends to continue to distributa 50 cants per quarter par common unit through at lesst the first quarter of 1987.

Amoco Calling Its 1989 Floating Rate Notes

Amoco Corporation, Chicago, will exarcise its right to call all of the $76,142,000 of outstanding floating rate notes due 1989 and listed on the New York Stock Exchange. Citibank NA in New York and First National bank of Chicago will act as co-paying agents. Amoco also will redeem $29,799,000 of debentures liated on the Luxembourg Stock Exchange.

Borden Completes Acquisition of Doxsee

Borden Incorporated has completed the previously announced acquisition of Doxsee Food Corporation for $32.5 billion, or $10.75 per share.

Albright & Wilson's Profits Off In 1st Half

Albright & Wilson Ltd., of the UK bad a 2 percent decline in sales in the first half to $491.4 million from $499.4 million a year ago, and profits before interest and taxation were off 3 percent to $36.2 million from $37.4 million. Capital expenditures were $15.1 million, versus $33.2 million a year earlier.

Cetus Corporation to Set Up Subsidiary In Europe

Cetus Corporation, Emaryville, Calif., will form a wholly owned subsidiary in Europe to develop, manufacture and directly market the company's therapeutic products on that continent. Initial focus of EuroCetus will be on interleukin-2, tumor necrosis factor, colony stimulating factor-1, human monoclonal antibodies and immunotoxins for breast and ovarian cancer.

Falconbridge Completes Sale of CFC Stake

Falconbridge Ltd., Toronto, Canada, has completed the sale of its 6,673,296 shares of Corporation Falconbridge Copper to Kerr Addison Mines Ltd. for $18 per share. The shares represent 50 percent of CFC's outstanding stock.

Freeport-McMoRan Gold Opens New Plant

Freeport-McMoRan Gold Company, New Orleans, La., has begun gold production from its new heap-leach facilities at its Jerritt Canyon mine, fifty miles North of Elko, Nev. This new process provides a low-cost mathod of recovering gold from Jerritt's lower-grade ores.

UCC Selling Electrical Carbon Business

Union Carbide Corporation intands to sell its electrical carbon business as a further step in its program to anbance shareholders' values. UCC will conduct business reviews with selected potential buyers in the next few weeks. Proceeds will be used to reduce corporate debt. The business has operations in Ohio, South Carolina, Canada, Mexico and England.

American Petrofina Plans Offering of Equity

American Petrofina Inc., Dallas, Tex., has filed a statement with Securities & Exchange Commission for the offering of 1,205,000 shares of class A common stock to its stockholders on a ratio of one new share for each ten now held, at a price of $45 per share. The company's parent, Petrofina Delaware, Inc. — a wholly owned subsidiary of Petrofina SA of Brussels, Belgium — will subscribe to the shares to which it is entitled.

Bayer's Income Rises on Steep Sales Drop

Bayer Group, of West Garmany, experienced a sharp sales decline of 12.2 percent in the first half to 21.596 billion West Garman marks (about $10.7 billion) from 24.593 marks ($1.23 billion) a year earlier, largely reflecting the decline in the value of the dollar versus the mark, along with some price weakness. Profits before taxes, however, rose slightly by 0.9 percent to 1.74 billion marks (about $885 million) from 1.725 million marks ($882 million).

Economics Lab Buys Chisso Stake in Japan

Economics Laboratory, St. Paul, Minn., a provider of institutional cleaning services and products, has purchased Chisso Corporation's 50 percent share in their joint Japanese venture, EI Japan, thereby raising its interest to 100 percent.

Enzon Planning to Raise New Capital

Enzon Incorporated, South Plainfield, N.J., developer of the process to modify enzymes with polyathylene glycol (PEG), is drawing up plans to increase its capital base. The program is expected to include the issua of 1 million new common shares for public trading, placement of a large block of untraded stock and sale of a signifioant investment to another pharmaceutical company. Enzon now has 3.3 million shares outstanding with a market value of about $70 million.

ICI, BOC, Wardle Storeys Shares Recommended

Greenwell Montagu Research in the UK has reaffirmed share purchase recommendations for Imperial Chemical Industries PIC, BOC Group PLC and Wardle Storeys PLC. The company's advice on Hickson International PLC and Yorkshire Chemicals PLC is to hold the shares. Recently the firm's analysts — Stuart Walmsley, David Ingles and Judy Shaw — raised their recommendation on Brent Chemicals PLC from hold to buy. The recommendation on Akzo NV of the Netherlands is to hold the shares.

HEAVY & AG CHEMICALS

Sulfuric Acid Mart

Continued from Page 7

Conn., that usually consumes acid recovered at Gaspe, is being supplied with US material bought by Noranda.

Noranda has also shipped virgin acid into Canada that was made by Essex at its Newark, N.J., plant. Norands considers this an exception, though, and says that for the most part Canadian accounts have been filled with Canadian acid, due to considerations of cost, shipping rates and currency values. Moreover, as other metal smelters come back on line after Summer turnarounds, Noranda feels more Canadian acid will become available to fill Canadian accounts.

Also affected by the strike is Delta Chemical, Inc., which markets some Noranda material. Sources say Delta has increased output from its Searsport, Maine, virgin acid plant since the strike began.

A Du Pont company sulfuric acid manager says that although his company markets no Canadian material, it has experienced increased demand at its Grasselli, N.J., sulfur burning plant. He says Du Pont has filled orders for some US buyers who ordinarily purchase Canadian acid. Du Pont produces virgin acid at a number of locations and markets domestic smelter acid.

Another repercussion of the strike is the August 20 start-up of one of C-I-L's sulfur-burning plants in Sayerville, N.J. C-I-L markets some of the output from the Valleyfield facility.

In May C-I-L had announced that the Sayerville plant would be re-started by the end of 1986. A spokesman now says the date was moved up, at least in part due to the Noranda strike. He says C-I-L's inventories began to drop this Summer and that the early start-up was necessary to ensure adequate customer supply.

Sources in the Southeast and Midwest say that the Norands shutdown has had little if any effect on supplies in those areas. In fact, a spokesman for PVS Chemicals, a large Midwest producer, says prices have suffered over the past few months as a result of competition from other sources in the North.

Prices in the northeast have been relatively stable, despite the market shifting, and start at about $85 per ton for 100 percent acid, sold to larger accounts. Prices in the Midwest, which had been on par with the Northeast this Spring, are said to have dipped about $3 per ton. Southeast pricing remains the lowest, between $55 and $60 per ton.

Bureau of Census figures indicate that prior to the Norands strike, Canadian sulfuric acid imports were running very strongly. Through June, 519,075 tons of acid were imported from Canada, as opposed to only 162,652 tons imported through June of 1665. Canada accounts for over 60 percent of all imports.

BASES & SALTS

ALUMINUM SULFATE — General Chemical Corporation (formerly Allied) has announced an increase in the schedule price of all grades of aluminum sulfate. The increase becomes effective immediately on spot orders and October 1, 1665, as allowed on contracts.

The new distributor schedule price of standard ground and low iron granular dry aluminum sulfate in 100 pound bags is $96 per net ton, f.o.b. manufacturing and warehouse locations East of the Rockies, and $88 per net ton f.o.b. Denver, Colo., and Bay Point, Calif.

The new distributor schedule price for powdered alum in 100 pound bags is $245 per net ton f.o.b. East St. Louis, Ill., and North Claymont, Del., and $275 per net ton, f.o.b. Bay Point, Calif.

Shipments ex-General Chemical warehouses will not be equalized with any competitive point.

A spokesman attributes the increase to higher labor and energy costs and to manufacturing costs unrelated to raw materials. General Chemical reduced dry alum prices in April from $217.60 per ton to $185 per ton in response to the threat of low priced imports from Jamaica (CMR, 5/5/86, pg. 14).

General Chemical now says import volume declined when the price was decreased and points out that a similar pricing response could be repeated if necessary.

CAUSTIC SODA — Last week three chlor-alkali producers announced price increases for liquid caustic soda, following the lead established by Dow Chemical (CMR, 8/25/66, pg. 27).

LCP Chemicals & Plastics Inc. has increased its off list price for liquid caustic soda by $30 per ton, effective immediately or as contracts allow. The increase is for both regular and rayon grade material. New prices will not exceed currently list prices which are $220 per ton for regular grade, $240 per ton for rayon grade, f.o.b. all shipping points.

Olin Corporation announced an increase in the off-list price of caustic soda by $35 per ton, effective immediately for spot customers and as contract terms permit.

Terms of sale for Olin remain f.o.b. plant, freight equalized with the nearest recognized competitive producing point at time of shipment.

Diamond-Shamrock Chemical Company also announced a $35 per ton increase in its off list price for liquid caustic soda, effective August 26 to spot customers, and as terms permit, to contract customers.

Diamond-Shamrock notes that [illegible] February, 1688 the chlor-alkali industry added 7,700 tons per day of effective capacity and that since peak capacity levels in 1685 operating capacity has been reduced by 10,000 tons per yds.

The company adds that demand for caustic soda has improved over 1985 levels and that liquid caustic soda inventories have declined significantly from 1985 year end.

SODIUM CHLORATE — Two sodium chlorate producers have announced price increases, following a move initiated by EkaNord, Inc. (CMR, 8/11/86).

Alby-Olin, a joint venture between Eka Nobel and Alby Kloral AB, is increasing the sodium chlorate price by $25 per ton, effective immediately for spot customers and according to terms for contract customers.

The new price of sodium chlorate crystal is $315 per ton, delivered, in the Northern US and $335 per ton, delivered, in the Southern US. The Southern region includes the states of Oklahoma, Arkansas, Tennessee and North Carolina and all states South.

Alby-Olin's new list price for solution sodium chlorate is $330 per ton, f.o.b. McIntosh, Ala., freight equalized with the nearest recognized producing point at time of shipment.

Kerr-McGee Chemical Corporation says that effective immediately it is amending the list price for bulk sodium chlorate crystal produced at Hamilton, Miss., and sold to the pulp and paper industry, to $335 per ton, freight allowed and prepaid.

The list price for Kerr-McGee's bulk sodium chlorate crystal produced at Henderson, Nev., will remain at $40 per ton, f.o.b. Henderson, Nev., freight equalized.

The price announcements follow a period of capacity rationalizations which has improved the industry's supply/demand picture (CMR, 7/26/86, pg. 9).

SULFUR DIOXIDE — Cominco American Inc. is increasing its price for sulfur dioxide to $150 per ton from $140 per ton. The new price is effective October 1 and is f.o.b. Trail, British Columbia.

A spokesman says the company is following a similar announcement made by Stauffer Chemical (CMR, 6/16/86, pg. 26). Cominco produces sulfur dioxide as a byproduct of zinc and lead smelting. Cominco's smelter is in the process of coming back from a month-long turnaround. Cominco shares the Northwest sulfur dioxide market with material sold by Stauffer and Virginia Chemical.

INDUSTRIAL ACIDS

HYDROFLUOSILICIC ACID — Gardinier Inc. says it is increasing the price of its hydrofluosilicic acid (HFS) and sodium silicofluoride (SSF), effective October 1. HFS will be hiked to $160 per ton, 100 percent ton basis, for contract customers. Spot sales, when available, will be at $210 per ton, 100 percent ton basis. The current price is $140 per ton.

SSF will be increased to $21.50 per hundredweight from $16.75 per hundredweight. Both prices are f.o.b. Tampa, Fla.

Gardinier attributes the increase to the continued tightness of the water fluoridation chemical market (CMR, 8/11/86, pg. 26). The announcement follows a similar one made by Freeport Chemical Company (CMR, 7/26/66, pg. 25). The two companies are generally regarded to be the largest SSF producers.

PRICE HIGHLIGHTS

INORGANICS IN AUGUST

	AUG. (US $)	JULY (US $)
Ammonia, US Gulf, barges	75-80	75-80
Caustic Soda, US Gulf, railcars	80-90	80-90
Chlorine, US Gulf, tankcars	140-150	140-155
DAP, US Gulf, barges	130-132	135-140
Soda Ash, Green River, Wyo., bulk/rail Acid, S.E., tankcars	75-77	74
	85-90	85-90

Prices are in short tons and represent spot quotations for large buyers.

PRICES TRENDLINES

WEEK ENDING AUG. 29, 1986

CHANGES/UP
Caustic Soda, $25 per ton
Sodium chlorate, $25 per ton

CHANGES/DOWN
None

HEAVY & AG INDEX

The Heavy & Ag Chemicals index reflects the prices of 18 representative materials in this sector and the quantity of each produced in 1985.

Aug. 29, 1986	113.86
Aug. 22, 1986	113.86
Aug. 1, 1986	113.86
Aug. 30, 1985	113.89

Chemical Prices Start on Page 34

COATINGS & PLASTICS

Du Pont and SCM Raise Tabs for TiO_2 Next Quarter

Responding to higher production and raw materiel costs, and the rising expense of complying with RCRA environmental regulations, both E.I. du Pont de Nemours Inc. and the Pigments Division of SCM Corporation plan to increase list prices for anatase and rutile grades of titanium dioxide (TiO_2) effective October 1.

An earlier July price led by NL Industries, which imports TiO_2 from Canada and West Germany, was not followed by US producers; the last successful domestic price increase occurred in October 1985.

SCM Corporation will move its rutile grades up by 3 cents per pound and its anatase grades by 4 cents per pound; the firm will be eliminating discounts, making the actual increase several cents per pound higher for most customers. According to a spokesman for the company, the industry needs to raise selling prices to ensure adequate supplies in this cost-intensive market, where even temporary problems with one or two isolated plants can have devastating effects on supply.

NEW SELLING PRICES

Maximum quantities (i.e., 20 tons and up) of its "Zopaque" RG, RGM and HSS anatase pigments will sell for 78c. per pound and "Zopaque" RCL and RCS rutile grades will sell from 81 cents to 83 cents per pound.

Du Pont plans to increase prices by 2 cents per pound for rutile and 3 cents per pound for anatase. The average selling price for their rutile grades will be 77 cents per pound, and that for anatase, 80 cents per pound.

Kerr-McGee Corporation, which manufactures a synthetic-based TiO_2 using ilemite, has not announced an increase, although company spokesmen concede that production costs have increased substantially within the past year.

Despite lower energy costs, producers report that costs of several key raw materials have increased substantially this year; costs of natural rutile, imported from a variety of sources including Canada, Africa and Australia, are said to have increased 12 to 30 percent over last year, reflecting cost of environmental compliance for ore miners.

Chlorine prices are up as well, producers relate. As the trend away from sulfate process to the environmentally sound chloride process, already complete in this country (only two domestic facilities out of nine currently use the sulfate process) becomes more pronounced worldwide, any change in chlorine prices is passed on to TiO_2 producers.

In addition, insurance and tax costs are reported to be up an additional 10 to 12 percent over last year.

The market is mature, but demand is strong, and expected to rise by 2 to 3 percent this year; different sources provide different projections — one producer expects it to move from 1985's 920,000 tons to between 930,000 and 940,000 tons this year; another reports that the demand last year was closer to 935,000 tons, and expects it to move up to around 995,000 tons.

Exports are expected to remain stable at last year's levels, as are imports.

Earlier in the year, analysts predicted a drop in import levels as the US dollar began to weaken. While sources indicate that several smaller producers in the Far East and Europe have dropped out of the market, they indicate that the large importers, particularly NL and Tioxide Inc., are set on maintaining a strong market presence here, and are prepared to "weather" economic conditions.

As once source explains, imports are needed to keep an already delicate supply and demand situation in balance; any decrease in imports could worsen an already "squeaking" supply situation.

All major domestic producers are planning extensive capacity expansions.

SCM expanded its Stallingsborough UK plant last year and is considering converting its Australian plant to chloride process — it has been involved in extensive debottlenecking projects, and is considering future expansions, to be phased in slowly.

Kerr-McGee completed expansions at its Hamilton, Miss., plant during the first quarter of 1986, and is considering additional expansions there in the future; the firm is also trying to license new production technology overseas, a company source states.

Du Pont is planning new operations "everywhere," according to a spokesman. In a well-publicized move to add 50,000 tons to its domestic output by 1988, the company has initiated different debottlenecking projects at the firm's four domestic plants.

Similar projects are planned for its Mexican plant, where the firm hopes to add 25,000 tons of capacity by 1988. New plants are scheduled to open in Taiwan in 1989, and in Korea and Brazil in 1990.

ENVIRONMENTAL PROTESTS

The firm had reportedly been having trouble getting construction of its chloride process plant underway in Taiwan, as local environmental groups protested (CMR, 7/14/86 p. 5). Fishermen and farmers in the area, worried about the effects the Du Pont plant might have on the ecosystem pressured officials into ordering the firm to prepare an extensive environmental impact study to assess possible damage before allowing construction to begin.

As a company source explains it, the situation experienced with the Taiwan plant is not a new one — virtually every new TiO_2 plant opening has met with protest from local environmental groups. It took four years to get the Mississippi plant opened.

In an attempt to demonstrate its good will, the company invited between 20 and 30 delegates from Taiwanese environmental groups to tour Du Pont's Delaware and Mississippi plants, to speak with federal and state legislators and environmentalists; this should continue until next year, by which time construction should begin. Cooperation with environmental groups is now accepted as an inherent part of new TiO_2 plant construction.

Supply levels are extremely tight. Some producers report that their customers are allowing four to six weeks for delivery. Those who have been able to keep up with orders cite increased cooperation with customers.

Capacity utilization is said to range from 95 to 100 percent; of nameplate, one firm reports that its debottlenecking projects have enabled it to operate at rates even slightly above published capacity. They feel

Continued on Page 20

PRICES TRENDLINES

WEEK ENDING AUG. 29, 1986

CHANGES/UP
None

CHANGES/DOWN
None

COATINGS INDEX

The Coatings & Plastics Index reflects the prices of 13 representative materials in this sector and the quantity of each produced in 1985.

Aug. 29, 1986	306.4
Aug. 22, 1986	306.4
July 31, 1986	306.4
Sept. 2, 1985	306.4

Chemical Prices Start on Page 34

CHEMICAL PRICES

WEEK ENDING AUGUST 29, 1986

This chemical prices section contains spot quotations and/or list prices of suppliers of chemicals and related materials on a New York or other indicated basis. The listings are based on price information obtained from suppliers. Note that posted prices do not necessarily represent levels at which transactions actually may have occurred. They do not represent bid and asked prices, nor a range of prices over the week. Price ranges may represent quotations of different suppliers as well as differences in quantity, quality and location. All matters under this heading are fully covered by copyright.

An index of weekly chemical market reports is on the back cover.

A

Abies siberica oil, cns. ... lb. 15.00 -
Acetaldehyde, 99%, tanks, frt. alld. lb. .37 -
Prices 1c. higher in West.
Acetaminophen (see N-Acetyl-p-aminophenol)
Acetanilide, tech, flaked, bgs, t.l., f.o.b. works ... lb. 1.29 -
Acetic acid, tech., tanks, dlvd. E ... lb. .25 -
Acetic anhydride, tanks, dlvd. E ... lb. .43½ -
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide, dms., t.l., dlvd. ... lb. 1.26 -
Acetoacet-o-anisidide, dms., t.l., dlvd. ... lb. 2.70 -
Acetoacet-o-chloroanilide, dms., t.l., dlvd. ... lb. 2.86 -
Acetoacet-o-toluidide, dms., t.l., dlvd. ... lb. 1.58 -
Acetoacet-m-xylidide, dms., t.l., dlvd. ... lb. 3.33 -
Acetone, tanks, dlvd. E. ... lb. .25 -
dlvd. Zone 2 (Calif.) ... lb. .27 -
dlvd. Zone 3 (W. of Rockies excluding Calif.) ... lb. .27 -
Acetonitrile, tanks, frt. alld. ... lb. .53 .54½
Acetophenetidin (see Phenacetin).
Acetophenone, tech., tanks, f.o.b. works ... lb. .76 .86
perfume grade, extra, cns. ... lb. 2.15 -
N-Acetyl-p-aminophenol, c.l., t.l. works ... kilo 5.95 6.64
Acetylene black, imp., 50% compressed, 12½-lb. bgs. c.l., t.l. frt. extra ... lb. .99 -
100%, 25-lb. bgs., same basis ... lb. .95½ -
Acetylene tetrabromide, tanks, f.o.b. works ... lb. .97 -
Acetylsalicylic acid, USP (see Aspirin).
Acetyltributyl citrate, bulk, f.o.b. works ... lb. 1.26 -
Acetyltriethyl citrate, bulk, f.o.b. works ... lb. 2.06 -
Acrolein, tech., tanks, works ... lb. .62 -
Acrylamide, solid, t.l. works ... lb. 1.00 -
soln., 100% basis tanks, works. ... lb. .74 .77
Acrylic acid, glacial, reg., tanks, dlvd. ... lb. .67 -
tech., tanks, frt. alld. ... lb. .60 -
Acrylonitrile, tanks, works ... lb. .39½ .45½
Acrylonitrile-butadiene-styrene resin, high-impact, nat., t.l., dms., dlvd. ... lb. 1.09 1.12
medium-impact, nat., same basis ... lb. 1.05 1.08
low-impact, nat., same basis ... lb. .98 1.01
Adipic acid, resin grade, bulk, hopper cars, frt. equald. ... lb. .57 -
bgs., t.l., c.l. frt. equald. ... lb. .59 -
Agar USP, powd., 60 to 100 mesh., dms. ... lb. 9.50 9.85
Alcohol, syn. C-8 to C-10, tanks, f.o.b. works ... lb. .36 -
C-12 to C-13, tanks, dlvd. ... lb. .57 .59
C-14 to C-15, tanks, dlvd. ... lb. .57 -
C-18 to C-18, tanks, dlvd. ... lb. .60 -
Aldehyde, C-9, dms. ... lb. 4.10 5.70
C-7, dms ... lb. 1.95 -
C-8, dms ... lb. 4.30 6.30
C-10 dms. ... lb. 4.30 5.35
Algin (see Sodium alginate.)
Alkali blue, dry, flushed, 110-lb. dms, dlvd. ... lb. 3.72 3.83
Alkali blue prices 1c. higher W. of Rockies.
Allspice Guatemalan / Honduran, bgs. ... lb. .88 -
Jamaican, bgs. ... lb. 1.05 -
Allyl alcohol, tanks, f.o.b., Bayport, Tex. ... lb. .90 -
Allyl bromide, 500-kilo dms. 2,000 lbs. or more, works ... lb. 5.50 -
Allyl caproate, 25-lb. cns. ... lb. 3.90 4.50
Allyl chloride, tanks, f.o.b. works ... lb. .65 -
Allyl isothiocyanate, bots. ... lb. 5.40 6.90
Almond oil, artif., bitter (see Benzaldehyde.)
Almond oil, nat. bitter, NF f.f.p.a. bots. ... lb. 3.50 3.60
sweet ... lb. 1.24 1.50
Aloe, Cape, cs. ... lb. 2.00 -
powd., cs. ... lb. 2.25 2.75
Curacao, kgs. ... lb. 2.60 -
powd., kgs ... lb. 3.00 -
Aloin, NF, dms. ... lb. 8.00 8.70
Alum, ammonium, tech. gran., bgs., c.l., t.l., works ... 100 lb. 35.00 -
FCC powd., fiber dms., works ... 100 lbs. 58.00 -
Alum, potassium, tech. gran. bgs., c.l., t.l., works ... 100 lbs. 35.00 -
FCC powd, fiber dms., works ... 100 lbs. 58.00 -

Alumina, activated, gran., 100-lb. bgs., 40,000-lb. min. c.l., works ... ton 621.00 -
calcined, bulk, same basis ... ton 354.00 -
100-lb. bgs., same basis ... ton 380.00 -
hydrated, white, bulk, same basis ... ton 180.00 -
100-lb. bgs., same basis ... ton 224.00 -
Aluminum acetate, basic, dms., l.c.l., works ... lb. 3.25 -
Aluminum chloride, anhyd., soln., 500-600 lb. dms., c.l., t.l., works, frt. equald. ... lb. .50 .55
bulk, same basis ... lb. .46½ .46½
semi-bulk bins, same basis ... lb. .48 .53
Aluminum chloride, coml., soln., 32° tanks, works ... 100 lbs. 16.00 -
ret. dms., c.l., works ... 100 lbs. 12.00 -
non-ret. dms., same basis ... 100 lbs. 20.00 -
Aluminum formate, dibasic, liq. 8% Al_2O_3 t.l., works ... lb. .55 -
Aluminum hydrate (see Alumina, hydrated)
Aluminum hydroxide, dried, gel, NF, 75-lb. dms., c.l., t.l., works. ... lb. 2.75 3.60
Aluminum metal, 88½% or more, 50-lb. pigs., 30,000-lb. lots, frt. alld. ... lb. .76 -
Aluminum oxide amorphous (see Alumina, calcined).
Aluminum paste, leafing grade, std., lining, 2,400 lb. lots, dlvd. ... lb. 1.40 -
lining, extra-fine, same basis ... lb. 1.99 2.14
Aluminum phenolsulfonate, purif., 100-kilo dms., t.l. ... kilo 6.49 -
Aluminum powder, leafing grade, std. lining, 2,400 lb. lots, dlvd. ... lb. 3.17 -
extra fine, lining, same basis ... lb. 4.04 -
Aluminum stearate, bgs., c.l. ... lb. 1.25 1.37
Aluminum sulfate, coml., grd., 100 lb. bgs., c.l., works, frt. equald., basis 17% Al_2O_3 East and Gulf Coasts ... ton 185.00 -
West Coast ... ton 217.80 -
liq., tanks, N.E. same basis ... ton 145.00 -
iron-free, dry, bgs., c.l. same basis ... ton 300.00 -
liq., tanks, same basis ... ton 225.00 265.00
Aluminum sulfate, USP, gran., dms. lb. - .337
Aminoacetic acid, USP, dms., 20,000 lbs., f.o.b. works ... lb. 2.12 -
tech., t.l., same basis ... lb. 1.66 -
p-Aminobenzoic acid, 1,000 kilos or more, dms., f.o.b. works ... kilo 8.60 10.10
2-Amino-4-chlorophenol dry and grd., 14,000 lbs. or more, frt. alld. lb. 5.79 -
Aminoethyl ethanolamine, tanks, frt. collect ... lb. 1.33½ -
N-Aminoethyl piperazine, tanks, f.o.b., frt. collect ... lb. 1.05 -
2-Amino-2-ethyl-1,3-propanediol dms., t.l. f.o.b. works ... lb. 1.82 -

2-Amino-2-methyl-1-propanol, 95%, dms., c.l., t.l., f.o.b. works ... lb .95 -
tanks, f.o.b. works ... lb. .69 -
o-Aminophenol, dms., f.o.b. Charlotte, N.C. ... lb 3.95 -
p-Aminophenol, t.l. dms., f.o.b. Raleigh, N.C. ... kilo 7.15 -
p-Aminosalicylic acid, USP, 50-kilo dms., t.l. ... kilo 18.50 -
Ammonia, anhyd., fertilizer, wholesale, tanks, dlvd. Midwest terminals ... ton 165.00 170.00
tankcars, f.o.b. Gulf Coast ... ton 80.00 85.00
aqueous, 29.4% NH_3, anhyd. basis, tanks, frt. equald. E. of Rockies ... ton 260.00 315.00
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac sal, galvanizing grade, bgs., c.l., f.o.b. works ... 100 lbs 28.60 -
Ammoniac sal. white (see Ammonium chloride coml.).
Ammonium biborate, gran., dms., c.l. works ... lb. .90 -
Ammonium biborate powder 15c. per lb. higher.
Ammonium bicarbonate, 300-lb. fib. dms., c.l., works ... 100 lbs. 26.00 -
bgs., c.l. ... 100 lbs. 25.00 -
Ammonium bichromate, photo-litho grade, gran. 100-lb. dms., l.t.l. works ... lb. 2.00 -
Ammonium bifluoride, bgs., t.l., works ... lb. .70 -
Ammonium bromide, dom. NF, gran., dms., c.l., t.l., f.o.b. works ... lb. 1.31 -
Ammonium chloride, white, tech., fine gran., bgs., c.l., works ... 100 lbs. 19.00 -
USP, gran., dms. ... lb. .40 .53
Ammonium citrate, dibasic, 250-lb. dms. f.o.b. works ... lb. 2.79 -
Ammonium dimolybdate, approx. 65%, 24,000 lbs. or more ... lb. 5.48 -
Ammonium fluoborate, tech., dms., c.l., t.l., works, frt. equald. ... lb. 1.79 -
Ammonium heptamolybdate, cryst., dms., 24,000 lbs. f.o.b. works ... lb. 5.57 -
Ammonium lauryl sulfate, tanks, f.o.b. works ... lb. .26 .32
Ammonium lignin, sulfonate, bulk, f.o.b. Hoquiam, Ore. ... ton 72.00 -
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bulk, S.E. dlvd. ... ton 130.00 135.00
Ammonium oxalate, tech., fine gran., 300-lb. dms., t.l., f.o.b. works ... lb. 1.42 1.68
Ammonium pentaborate gran. bgs., c.l., works ... lb. .75 -
Ammonium pentaborate powder 20c. per lb. higher.
Ammonium persulfate, 225-lb. dms, 24,000 lbs. or more, f.o.b. works ... lb. .66 -
55-lb. bgs., same basis ... lb. .68½ -
Ammonium phosphate (see Di- and monoammonium phosphates).
Ammonium silicofluoride, dms. c.l., t.l., works ... lb. .30½ -
Ammonium sulfate, lg. gran., bulk, c.f., works ... ton 80.00 80.00
std., coml., bulk, f.o.b. works ... ton 60.00 70.00
tech., bgs., c.l., t.l., works ... ton 109.00 120.00
Ammonium sulfide, liq., 40-44% tanks, 100% basis, frt. equald. ... ton 460.00 -
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., bgs., c.l., works ... lb. 1.02 -
tech soln., 50%, tanks, frt. equald., ... lb. .93 -
Ammonium thiosulfate, photographic, 60%, tanks, f.o.b. works ... lb. .13 -
Ammonium zirconyl carbonate, soln., bulk ... lb. .72 -
Amyl acetate, primary mixed isomers, tanks, dlvd. ... lb. .57 -
Amyl alcohol, primary mixed isomers, tanks, frt. alld. ... lb. .40½ -
Amyl cinnamic aldehyde, dms. ... lb. 2.35 2.50
p-tert-Amylphenol, bulk, works ... lb. .81 1.03
Amyris oil, dms. ... lb. 11.50 12.25
Anethole, tech., dms. ... kilo 10.20 -
USP, dms. ... lb. 3.05 4.60
Angelica root oil, bots. ... kilo 700.00 -
Aniline, tanks, f.o.b. ... lb. .33 .36½
Anise oil, dms. ... kilo 11.75 -

Anise seed, Egypt. bgs ... lb. .53 -
Spanish, bgs. ... lb. 1.00 -
Turkish, bgs. ... lb. .85 .90
Anisic aldehyde, cns., dms ... lb. 4.80 5.40
o-Anisidine, imp., dms., dlvd ... lb. 2.27 -
p-Anisidine, imp., cost sold, dms., works ... lb. 1.90 -
flakes, same basis ... lb. 2.25 -
Anthranilic acid, purif., 99% min., dms., t.l., frt. alld. ... lb 1.70 -
Antimony fluoborate, liq. conc., 175-lb. dms., t.l., works ... lb 3.02 -
Antimony metal, bulk, c.l., mines ... lb. 1.36 1.39
Antimony oxide, high-tint, bgs., c.l., frt. alld. E. of Rockies ... lb. 1.40 1.50
Antimony trichloride, anhyd., solid, dms., t.l. works ... lb. 3.60 -
Apomorphine hydrochloride, NF, bots. ... gm. 15.00 -
Apricot kernel oil, dms ... lb. 2.05 -
Arabic gum, powd., bbls ... lb. 1.85 2.15
spray dried ... lb. 2.00 2.50
USP grade ... lb. 8.75 9.25
Aromatic petroleum solvents (see Solvent, naphtha, petroleum, aromatic)
Arsenic, crude (see Arsenious trioxide).
Arylid, red (see Napthol, arylid red)
Arsenious trioxide, 99%, bulk, c.l., f.o.b. warehouse ... lb. .42 .45
Asbestine (see Talc, fibrous).
Ascorbic acid, USP, 100 kilos, dlvd. ... kilo 9.00 10.50
Ash, black (see Barium sulfide).
Asphalt gilsonite, (see Gilsonite).
Asphalt petroleum cutback, tanks, E. Coast ... gal. .88 -
emulsion, tanks, tankwagons, E. Coast ... gal. .68 -
steam-refined, 40-300 penetration, tanks, tankwagon ... ton 170.00 -
steeproofing grade, bulk tankwagon ... ton 175.00 -
Aspirin, USP, cryst., powd., 250-lb. dms., c.l., f.o.b. ... lb. 1.95 -
10% starch granulation, white, 250-lb. dm, c.l., f.o.b ... lb 1.97 -
15% starch granulation, white, same basis ... lb. 2.80 -
Freight equald. shipt. identical quantity over standard rate from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Atropine sulfate, USP, bots ... oz. 10.00 11.00
Avocado oil, dms. ... lb. 4.00 4.50
Azelaic acid, tech., 50-lb. bgs., t.l., c.l., dlvd. ... lb. 1.23 -
Azo orange, bbls., dlvd. ... lb. 4.60 -
Azo yellow, 10 G, bgs., dlvd. E. of Rockies ... lb. 4.40 -
Azo G yellow pigment, bgs., same basis ... lb. 2.45 -

B

Bacitracin, USP, non-sterile, one billion units or more ... million units 6.30 8.80
Barbital, NF, 50-kilo dms., dlvd. ... kilo 22.50 -
Barbital-sodium, NF, 50-kilo dms. dlvd. ... kilo 23.00 -
Barite, dry-grd., Southern, off-color, coarse, bgs., c.l., f.o.b. mines lb. .09 .11
water-grd., white, bgs., c.l., f.o.b. works ... lb. .13 -
unbleached, extra-fine, pigment grade, c.l., f.o.b. works ... ton 160.00 -
Barium carbonate, precip., bulk, c.l., works, frt. equald. ... lb. .25 -
bgs., same basis ... lb. .25½ -
photo grade, bgs., same basis ton 510.00 -
Barium chlorate, 100-lb. dms., 1-10 dm. lots, works ... lb. 1.04 -
Barium chloride, tech., cryst., bgs., c.l., works ... ton 470.00 -
anhyd. drums c.l., same basis ton 590.00 -
Barium chloride, purif., cryst. 400-lb. dms., works ... lb. 3.78 -
Barium monohydrate, 55-lb. bgs., c.l., t.l. f.o.b. works ... 100 lbs. 46.00 -
octahydrate, cryst., bgs., same basis ... 100 lbs. 33.60 -
Barium nitrate, 100-lb. bgs., t.l., works ... 100 lbs. 32.50 -

ABBREVIATIONS

THE TERMINOLOGY OF THE CHEMICAL MARKETPLACE

a/alpha
alld./allowed
amorph./amorphous
AMP/American melting point
anhyd./anhydrous
AOAC/Association of Official Agricultural Chemists
a.p.a./available phosphoric acid
approx./approximately
artif./artificial
ASTM/American Society for Testing & Materials

b/beta
Be/Baume
bbls./barrels
b.g./beta-gamma
bgs./bags
bls./bales
bots./bottles
b.p./boiling point
b.p.l./bone phosphate of lime
b.r./boiling range
bxs./boxes

C./Centigrade
cbys./carboys
c.c./cubic centimeters
CD/completely denatured
c.i.f./cost insurance freight
c.l./carload
cns./cans
coml./commercial
conc./concentrated
cp/chemically pure
cps./centipoises
cryst./crystalline
cs./cases
ctns./cartons
cyls./cylinders

d-/dextro
dbl./double
denat./denatured
dest.-dist./destructively distilled
dl/dextro-laevo
dist./distilled
distr./distributor
dlvd./delivered
dms./drums
dom./domestic

E/East
e.p./end point
equald./equalized
exp./expressed
extr./extracted

F./Fahrenheit
f.a.s./free alongside
ferment./fermentation
f.f.a./free fatty acid
f.f.c./free from chlorine
f.f.p.a./free from prussic acid
fib./fiber
f.o.b./free on board
f.p./freezing point
frt./freight

g-/gamma
gal./gallon
g.p./general purpose
gran./granular
grd./ground

i.b.p/initial boiling point
imp./imported

incl./included
indust./industrial

kgs./kegs

l-/laevo
lb./pound
l.c.l./less carload
l.t.l./less truckload
liq./liquid

m-/meta
m.a.p./mixed aniline point
mcg./microgram
mfrs./manufacturers
min./minimum
molt./molten
m.p./melting point

N/nitrogen
n-/normal
nat./natural
neut./neutral
NF/National Formulary
No./number
Nom./nominal

o-/ortho
ord./ordinary
oz./ounce

P/phosphorus
p-/para
Pac./Pacific
pf./proof
phos./phosphate
photo/photographic
pkgs./packages
powd./powdered
precip./precipitated
prod./producer
pt./point
pulv./pulverized
purif./purified

redist./redistilled
refd./refined
refy./refinery
resub./resublimed
ret./returnable

SD/specially denatured
s.d./single distilled
SE/Southeast
sec./secondary

secs./seconds
sp.g./specific gravity
shipt./shipment
soln./solution
std./standard
syn./synthetic

tanks/railroad tankcars
tech./technical
tert./tertiary
t.l./truckload
ton/refers to short ton of 2,000 pounds
TVA/temporary voluntary allowance
t.w./tankwagons

USP/United States Pharmacopeia

vis./viscosity
VM&P/varnish makers & painters

W/West
whse./warehouse
w.w./water white

NOTE: A unit-ton is 1 percent of 2,000 pounds of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the unit-ton price shown in Chemical Marketing Reporter gives the price of 2,000 pounds of the material.

CHEMICAL PRICES

WEEK ENDING AUGUST 29, 1986

Barium oxide, grd., dms., c.l., dlvd. ... 100 lbs. 31.25 -
tote bins, same basis ... 100 lbs. 30.00 -
Barium peroxide, 700-lb. dms., c.l., t.l., works ... lb. .30 -
Barium stearate, bulk, t.l., f.o.b. dest. ... lb. 1.05 -
Barium sulfate, tech. (see Barite and Blanc fixe).
Barium sulfate, USP, X-ray diagnosis grade, powd., 25 kilo bgs., 10,000 kilo lots ... lb. .56½ -
Barium sulfide (black ash), dms., c.l., works ... ton 460.00 -
Basil Egyptian ... lb. .75 .85
French ... lb. .86 .90
Basil oil, Comores ... lb. 90.00 -
Basil oil, Grand Vert ... lb. 46.00 -
Battery acid, t.l., f.o.b., works ... ton 62.00 70.75
Bauxite, calcined, refractory grade, 87%-88% Al_2O_3, Baltimore & Mobile ... metric-ton 228.26 -
Bay oil, NF, 55-60%, dms. ... lb. 10.50 15.00
Bayberry wax, bgs. ... lb. 2.70 3.00
Beeswax, refd., bleached white, bricks, 100-lb. ctns. ... lb. 3.10 3.20
white, slabs, 100-lb. ctns. ... lb. 3.05 3.10
yellow, bricks, 100-lb. ctns. ... lb. 3.00 3.10
yellow, slabs, 100-lb. ctns. ... lb. 2.85 3.05
Bentonite, dom., c.l. bags, f.o.b. works ... ton 43.50 -
Benzaldehyde, NF, dms. ... lb. 1.25 -
tech., dms., c.l., t.l. ... lb. .73 .83
Prices are 4c. per lb. higher West of the Rockies.
Benzene, indust. or nitration, barges, f.o.b.
Baton Rouge, La. ... gal. .80 -
Baytown, Tex. ... gal. .80 -
Beaumont, Tex. ... gal. .80 -
Catlettsburg, Ky. ... gal. .80 -
Chicago district ... gal. .80 -
Chocolate Bayou, Tex. ... gal. .80 -
Clairton, Pa. ... gal. .80 -
Corpus Christi, Tex. ... gal. .80 -
Deer Park, Tex. ... gal. .80 -
Houston district, spot ... gal. .76 .77
Wood River, Ill. ... gal. .80 -
Benzene hexachloride, 99% gamma isomer (see Lindane).
Benzidine orange, powd., bgs., dlvd. lb. 4.90 9.70
liq., containers, dlvd. ... lb. 3.36 3.69
Benzidine yellow, AAA, bgs., dlvd. lb. 5.80 6.05
AAOA, bgs., dlvd. ... lb. 7.35 7.40
AAOT, bgs., dlvd. ... lb. 5.65 6.20
Benzocaine, USP, dms., 1,000 kg. lots, f.o.b. works ... kg. 10.00 11.50
Benzodihydropyrone, dms. ... lb. 12.50 -
Benzoic acid, tech., bgs., c.l., t.l., f.o.b. works ... lb. .55 .58
USP cryst., dms., ton lots same basis ... lb. 1.73 1.75
Benzoin gum, Sumatra, cs. ... lb. 1.60 -
Benzophenone, N.F., 1,000 lbs. or more, f.o.b. ... lb. 3.50 3.80
N.F., 1,000 kilos or more, f.o.b. ... kg. 7.45 -
tech, 1,000 kilos or more, f.o.b works ... kgs. 4.35 -
2,2-Benzothiazyl disulfide (see Mercaptobenzothiazyl disulfide).
Benzotriazole, flake, dms., 1,000 lbs. or more, f.o.b. works ... lb. 9.10 -
powd., dms., 1,000 lbs. or more, same basis ... lb. 9.20 -
photo-grade, dms., 1,000 lbs. or more, same basis ... lb. 9.80 -
Benzotrichloride, refd., dms. t.l., frt. equald. ... lb. .97 -
tanks, frt. equald ... lb. .80 -
Benzoyl chloride dms., c.l., works ... lb. .57 .58
tanks, frt. equald. ... lb. .74½ .75
Benzoyl peroxide, regular gran., 10,000-lb. lots or more, bgs., works, frt. equald. ... lb. 2.36 9.86
paste, 50% and 55% formulations, dms., pails, frt. equald. ... lb. 1.71 1.95
Benzyl acetate, dms. ... lb. 1.20 2.50
Benzyl alcohol, N.F. t.l. dms. frt. equald. ... lb. 1.26 1.05
tanks, same basis ... 1.37 1.43
photo grade, t.l., dms., same basis ... lb. 1.40 -
tanks, same basis ... 1.34 -
tech. grade, t.l., dms., same basis lb. 1.32 -
tanks, same basis ... 1.28 -
Benzyl benzoate, dms. ... lb. 1.65 2.26
Benzyl chloride, tech., non-ret. dms., c.l., t.l., frt. equald. ... lb. .59 -
tanks, f.o.b. ... lb. .54 -
Benzyl cinnamate, 25-lb. cns. ... lb. 8.50 9.95
n-Benzyl-N,N-dimethylamine, t.l., dms., f.o.b. works ... lb. 2.30 -
Benzyl formate, dms. ... lb. 10.60 -
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Benzyl isoeugenol, dms. ... lb. 15.50 -
Benzyl propionate, dms. ... lb. 3.35 -
Benzyl salicylate ... lb. 2.90 3.25
Benzylidine acetone, cns., bots. ... lb. 2.86 3.25
Bergamot oil, nat., Italian, f.o.b. ... kilo 40.00 -
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Biotin, cryst., 500 gms. or more ... gm. 5.50 -
Biphenyl (see Diphenyl).
Bismuth nitrate, purif. cryst., 100-lb. dms., frt. equald. ... lb. 10.00 -
Bismuth oxychloride, 100-lb. dms., works ... lb. 17.20 -
Bismuth subcarbonate, USP, medium powd., 225-lb. dms., works. lb. 15.31 15.50
Bismuth subgallate, purif., 100-lb. dms., works ... lb. 10.50 -
Bismuth subnitrate NF, powd., 200-lb. dms., works ... lb. 14.45 -
Bismuth subsalicylate, purif. powd., 50-100 lb. dms., works ... lb. 17.00 -
Bismuth trioxide, reagent, powd., 100-lb. dms., works ... lb. 15.00 15.45
Bisphenol-A, epoxy grade, hopper cars, dlvd. ... lb. .67 -
polycarbonate grade, same basis lb. .71 -
Blanc fixe, syn., imp., bags ... lb. .20 -
Bois de rose oil, Braz., dms. ... lb. 10.75 12.00
Peruvian, dms. ... lb. 10.75 -
BON toner (red 48) dms., frt. alld. ... lb. 7.25 9.05
(red 52) dms., same basis ... lb. 8.60 7.90
Bonemeal, steamed, dom., bgs., c.l., f.o.b. Midwest plants ... ton 180.00 190.00
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate tribasic).
Borax, tech. anhyd. 99%, bgs., c.l., works ... ton 647.00 -
bulk, t.l., works ... ton 602.00 -

Borax, tech., gran., decahydrate, 99½% bgs., c.l., works ... ton 237.00 -
bulk, c.l., works ... ton 192.00 -
tech., pentahydrate, gran. 99½%, bgs., c.l., works ... ton 265.00 -
bulk, c.l., works ... ton 220.00 -
Borax, NF (See Sodium borate).
Boric acid, tech., gran., 99.9%, bgs., c.l., works ... ton 614.00 -
bulk, c.l., works ... ton 569.00 -
Boron trichloride, CP, 1,600-lb. cyls., works ... lb. 6.80 -
Boron trifluoride, 60-lb. cyls., t.l., f.o.b. works ... lb. 4.03 -
bulk, same basis ... lb. 3.47 -
Boron trifluoride, etherate, 500-lb. dms., t.l., f.o.b., works ... lb. 2.35 -
phenolate, 500-lb. dms., t.l., same basis ... lb. 1.65 -
Bromine, dms., t.l., works ... lb. .67 -
bulk, 45,000-lb. min., works ... lb. .33 .34½
purif., t.l., dlvd. ... lb. .75 -
Bromine dlvd., prices for dms. and bulk shipped W. of Rockies, 1c.-per-lb. higher. Bulk t.l. prices 1c. to 2½c.-per-lb. higher for 30,000-lb. min. and 4c. to 5½c.-per-lb. higher for 15,000-lb. min.
Bromochloromethane, dms., c.l., f.o.b. Midland ... lb. 1.12 -
Butadiene, tanks, f.o.b. ... lb. .26 .26½
1,4-Butanediol, tanks, f.o.b., frt. equald. ... lb. .80 -
dms., same basis ... lb. .86 -
Butene-1, tanks, f.o.b. works ... lb. .26 .28
n-Butyl acetate, syn., tanks, frt. alld. lb. .52½ -
n-Butyl acrylate, tanks, frt. alld. E. ... lb. .69 -
n-Butyl alcohol, syn., ferment, tanks, frt. alld. ... lb. .34 -
sec-Butyl alcohol, syn., tanks, dlvd. lb. .395 -
tert-Butyl alcohol, syn., tanks, dlvd. E. ... lb. .70 -
Butyl aldehyde (see Butyraldehyde)
Butyl benzyl phthalate, tanks, frt. alld. ... lb. .53 -
Butyl chloride, tanks, works ... lb. .86 1.00
Butyl cyclohexyl phthalate, tanks, dlvd. ... lb. 1.01 -
n-Butyl ether, dms., c.l., t.l., works. lb. 1.85 -
Butyl isodecyl phthalate, tanks, dlvd. ... lb. .35 -
n-Butyl lactate, tanks, f.o.b. works lb. 1.56 -
n-Butyllithium, 15% soln., 1,000-lb. lots or more, cyls., 100% basis, dlvd. ... lb. 15.45 -
tanks, 3,000-lb. min., 100% basis, dlvd. ... lb. 14.75 -
Butyl methacrylate, tanks, frt. equald. ... lb. .86 -
Butyl octyl phthalate, tanks, dlvd. E. ... lb. .45 .47
Butyl oleate, dist., dms., c.l. ... lb. .66 -
tanks ... lb. .63 -
p-tert-Butylphenol, tanks works ... lb. 70 -
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate cosmetic, dms., 77 dms. or more ... lb. .81 .97
tanks ... lb. .92 -
Butyl stearate tech., t.l. ... lb. .60 .62
tanks ... lb. .55 .59
Butylamine (see Mono-, Di- and Tributylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works ... lb. 1.31 -
tanks, same basis ... lb. 1.17 -
Butylated hydroxyanisole, food grade, dms., dlvd. ... lb. 9.80 9.85
Butylated hydroxytoluene, food, feed grades, c.l., t.l., bgs., dlvd. lb. 1.24 1.30
tech., bgs., c.l., t.l., dlvd. ... lb. 1.24 1.30
1,3-Butylene glycol, tanks, dlvd. ... lb. .72 -
Butyraldehyde, tanks, dlvd. ... lb. .26½ .36
Butyric acid, tanks, frt. alld. ... lb. .44½ -
Butyric ether (see Ethyl butyrate).
Butyrolactone, tanks, f.o.b. plant ... lb. 1.20 -
n-Butyronitrile, dms., c.l., dlvd. ... lb. .93 -
tanks, dlvd. ... lb. .54 -

C

Cadmium chloride, purif., cryst., 100-lb. dms., t.l., works ... lb. 3.73 -
Cadmium, CP, red, dark shade, bbls., 100-lb. lots, frt. alld., E. of Rockies ... lb. 11.33 19.35
light shade, bbls., same basis ... lb. 9.19 12.06
medium shade, bbls., same basis lb. 10.69 15.20
medium-light shade, bbls., same basis ... lb. 10.26 14.50
Cadmium, CP yellow, all shades, bbls., 100-lb. lots, frt. alld., E. of Rockies ... lb. 6.10 7.07
Cadmium fluoborate, liq. conc., dms., t.l., works, frt. equald. ... lb. 2.27 -
medium-light shade, bbls., same basis ... lb. 3.22 -
Cadmium-mercury lithopone, maroon shade, bbls., frt. alld. E. of Rockies ... lb. 4.60 -
Cadmium metal ingots or sticks, ton lots, cs., dlvd. ... lb. 1.20 1.50
Cadmium nitrate, purif., flake 400-lb. dms., c.l., t.l., f.o.b. ship. pt. lb. 2.10 -
Cadmium-selenide-lithopone, orange, light shade, bbls., 400-lb. lots. frt. alld. E. of Rockies ... lb. 3.97 4.00
deep shade, bbls., same basis ... lb. 4.47 4.50
Cadmium-selenide lithopone, red, dark shade, bbls., same basis. lb. 6.77 9.80
light shade, bbls., same basis ... lb. 5.27 5.30
medium light shade, bbls., same basis ... lb. 5.72 5.75
medium shade, bbls., same basis lb. 6.37 6.40
maroon shade, bbls., same basis lb. 7.47 -
Cadmium-selenide lithopone, yellow, all shades, bbls., same basis. lb. 2.97 3.00
Cadmium sulfate, 50-lb. dms., any quantity, f.o.b. ship. pt. ... lb. 4.05 -
Caffeine, dom., USP, syn. cryst. anhyd., powd., 100-lb. dms., c.l., t.l., frt. alld. ... lb. 4.60 -
imp., cryst., anhyd., powd., dms., 10,000 lbs. or more ... lb. 4.70 4.85
Calamine, USP, dms. ... lb. 1.50 1.70
Calamus oil, dms. ... lb. 26.80 35.00
Calciferol. (see Ergocalciferol).
Calcium acetate, purif., powd., dms., t.l., works ... lb. .87 -

Calcium carbide, std., generator size, bulk, c.l., f.o.b., works ... ton 402.00 -
Calcium carbonate, pulverized, 325-mesh, bgs., bulk, f.o.b. works ... ton 34.50 -
slurries, 54% solids, same basis ... ton 167.00 -
72% solids, same basis ... ton 68.00 -
quicklime, gran., ind., bulk, works ... ton 67.00 -
Calcium carbonate, coated, bgs., c.l., works ... lb. .0742 .1350
Calcium carbonate, precip., bgs., cl., t.l. ... ton 670.00 430.00
Calcium carbonate precip. medium, bgs., c.l., works ... ton 95.00 140.00
precip. dense. bgs., c.l., surface treated, bgs., c.l., works ... ton 165.00 -
ultrafine, USP, bgs., c.l., works ... ton 160.00 170.00
Calcium chloride, conc., reg. grade 77-80%, flake, bulk, c.l., works ... ton 153.00 -
100-lb. bgs., c.l., same basis ... ton 166.00 -
anhyd., 94-97%, flake or pellet, bulk, c.l., same basis ... ton 217.00 -
80-lb. bgs., c.l., same basis ... ton 279.00 -
brining grade, 80-lb. bags ... ton 285.00 -
Calcium chloride, liq., 100 percent basis, t.c., t.t., barge ... ton 99.75 -
45% same basis ... ton 116.00 -
Calcium chloride, USP, gran., 225-lb. dms., t.l., frt. equald. ... lb. .60 -
Calcium citrate, purif., 200-lb. dms., 10,000 lbs. or more, f.o.b. works ... lb. 3.82 -
Calcium cyanamide, indust., anhyd. dms., works ... ton 400.00 450.00
Calcium gluconate, USP powd. t.l. ... lb. 1.60 -
Calcium hydride, lump, dms., 25-1,000-lb. lots, works ... lb. 10.50 13.25
Calcium hypochlorite, 100-lb. dms., truckloads ship't. E. of Rockies ... 100 lbs. 92.40 -
Calcium hypophosphite, dms., bulk, 500 kilos or more ... kilo 13.75 14.50
Calcium iodate, FCC dms., f.o.b. works ... lb. 5.50 -
Calcium iodide, 50-kilo dms., f.o.b. works ... kilo 23.65 25.65
Calcium lactate, NF, powd., pentahydrate, dms., 24,000 lbs. or more, f.o.b. works ... lb. 2.00 -
NF, gran., trihydrate, same basis. lb. 2.10 -
special gran, dried grade, same basis ... lb. 2.60 -
Calcium naphthenate, liq., 4% Ca., c.l., f.o.b. plant, E. of Rockies. lb. .85 -
d-Calcium pantothenate, USP, 100-500-kilo lots. ... kilo 10.50 11.50
dl-Calcium pantothenate, feed grade, f.o.b. frt. alld., 250 kilos or more ... kilo 8.00 8.50
dl-Calcium pantothenate, calcium chloride complex, feed grade, 180 grams per lb., f.o.b., frt. alld., 500 lbs or more ... lb. 2.75 -
Calcium phosphate, dibasic, feed grade, 18½% P. bulk, c.l., t.l., f.o.b. works ... ton 226.00 -
Calcium phosphate, dibasic, dihydrate, USP, bgs., c.l., t.l., works, frt. equald. ... 100 lbs. 62.50 -
anhyd., USP, same basis. ... 100 lbs. 71.75 -
dentifrice grade, same basis. 50 lbs. 46.90 -
Calcium phosphate, monobasic, monohydrate, food grade, bgs., c.l., t.l., works, frt. equald. ... 100 lbs. 50.50 -
anhyd., food grade, same basis ... 100 lbs. 54.95 -
tribasic, NF precip., bgs., c.l., frt. equald. ... 100 lbs. 62.50 -
Calcium propionate, dms., 2,000 lbs. or more f.o.b. frt. alld. ... lb. .50 .55
Calcium silicate, hydrated, bgs., c.l., works ... lb. .07 -
Calcium silicate, paint grade (see Wollastonite).
Calomel, NF, mild powd., 100-lb. dms., f.o.b. works ... lb. 8.50 -
Camphene chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, dms., kgs. ... lb. 3.63 3.70
Camphor, syn., tech., 165-lb. dms., 5,000 lbs. or more ... lb. 1.80 -
USP, powd., 165-lb. dms., 9,000 lb. lots or more ... lb. 2.36 -
syn., refd., 1-oz. tablets, ctns. 1,000-lb. lots or more ... lb. 3.50 -
Camphor oil, yellow, 25-lb. dms ... lb. 2.50 -
white, dms. ... lb. 1.50 -
spec. grav., 1.070, dms. ... lb. 2.00 2.25
Cananga oil, Indonesian, dms. ... kilo 17.00 -
Candelilla wax, crude, bgs. ... lb. 1.90 -
refd. pure, bgs. ... lb. 2.10 -
Capric acid, coml. pure, dms. ... lb. .60 .65
tanks ... lb. .60 .65
Capric aldehyde (aldehyde C-10) dms., cns. ... lb. 3.95 5.35
Caprolactam monomer, flake, bgs., t.l., f.o.b. shipping point ... lb. .67 -
molten, tanks, same basis ... lb. .65 -
Capryl alcohol sec. 92-98% tanks, f.o.b. works ... lb. .65 -
Caprylic acid, coml. pure tanks ... lb. .73½ -
Capsicum (see Pepper, red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms. ... lb. 11.00 -
NF, from African pepper, dms. 500,000 pungency ... lb. 8.00 -
1,000,000 pungency ... lb. 17.00 18.00
Caraway oil, Poland, dms ... lb. 22.00 25.00
Caraway seed, Dutch, bgs. ... lb. .63 -
Egyptian, bgs. ... lb. .53 -
Carbon black, furnace, fast extruding (FEF), bulk, c.l., works ... lb. .2125 -
bgs., c.l. works ... lb. .2425 -
general purpose (GPF), bulk, c.l., works ... lb. .2075 -
bgs., c.l. works ... lb. .2375 -
high abrasion (HAF), high structure, bulk, c.l. works ... lb. .2300 -
bgs., c.l. works ... lb. .2600 -

Carbon Black, low structure, bulk, c.l. works ... lb. .240 .260
bags, c.l. works ... lb. .270 .290
intermediate-super-abrasion (ISAF) ... lb. .25 -
bgs., c.l. works ... lb. .28 -
super-abrasion (SAF), bulk, c.l., works ... lb. .31 -
bgs., c.l., works ... lb. .4050 -
semi-reinforcing (SRF), bulk, c.l., works ... lb. .210 -
bgs., c.l., works ... lb. .240 -
Carbon black, thermal, medium, bgs. c.l., works ... lb. .30 .30½
bulk, c.l. works ... lb. .32 .34½
Carbon black oil, barge, f.o.b. Gulf refineries ... bbls. 10.50 12.50
f.o.b. W. coast refineries ... bbls. 10.50 12.50
Carbon disulfide, t.c., f.o.b. works ton 420.00 -
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. ... lb. .36 -
tech., dms., c.l., t.l., frt. alld. ... lb. .31 -
tank transport (min. 4,000 gals.) frt. alld. ... lb. .24 -
Carboxymethyl cellulose (see CMC).
Cardamom oil, NF, bots. ... lb. 75.00 100.00
Cardamoms, decort. Guatemalan. . lb. 3.00 -
green, Guatemalan, bgs. ... lb. 8.25 9.75
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd. ... lb. 135.00 140.00
Carnauba wax, Parnahyba, No. 1, yellow, bgs., ton lots ... lb. 1.85 2.05
Ceara, No. 1, yellow, bgs., ton lots ... lb. 1.75 1.80
North Country, No. 2, refined, bgs., ton lots ... lb. 1.55 1.65
Carnauba wax, North Country No. 3, centrifuged, bgs., ton lots . lb 1.10 -
North Country, No. 3, refined, bgs., ton lots ... lb. 1.30 1.45
Powdered carnauba wax, 20 to 100 mesh, 20c. per lb. higher.
b-Carotene, in vegetable oil, semi-solid suspension, 400,000 A units per gram., 33 lbs. or more . lb. 32.75 -
b-Carotene, liq. in vegetable oil, 500,000 A units per gram., 33 lbs. or more ... lb. 40.75 -
b-Carotene, dry, beads, 10%, 167,000 A units per gram 50-lb. cns lb. 26.65 -
d-Carvone, 25-lb. dms., syn. ... lb. 48.00 -
l-Carvone ... lb. 7.00 7.25
Cascara sagrada bark, bulk ... lb. 1.00 -
Casein, imp., acid-precip., grd., 30-mesh, Australian, edible, same basis. c.i.f. ... lb. 1.45 -
Australian, indust., same basis, c.i.f. ... lb. 1.365 -
Cassella acid, 303 mol. wt., dms., frt. alld., 100% basis ... lb. 3.70 -
Cassia, Korintji "A" bgs. ... lb. .90 .94
"B" bgs. ... lb. .72 .76
Castor oil, raw, No. 1, Braz. tanks. . lb. .32 -
USP 5-9 dms. ... lb. .74 -
refd. deod., 5-9 dms. ... lb. .78 -
blown, 5-8 dms. ... lb. .75 -
dehydrated, bodied, tanks ... lb. .74 -
dehydrated, unbodied, tanks ... lb. .55 -
Castor oil, acids dehydrated, dms. . lb. 1.10 -
ricinoleic acid. ... lb. .79½ .83
Castor pomace, bgs., container load, f.o.b., Miami, Fla. ... ton 154.00 -
Castoreum, nat., cns. ... lb. 16.00 35.00
syn., cns. ... lb. 11.00 -
Catechol, CP, 45-kilo dms., 80-239 dms., f.o.b. ... kilo 7.93 -
tech., bgs., t.l., same basis ... kilo 3.71 -
Caustic potash (see Potash, caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, dms. ... lb. 17.50 -
Cedarwood oil, Texas, dms., cns. . lb. 3.50 4.00
Virginia ... lb. 3.70 4.20
Cedrol, prime dms. ... lb. 5.25 -
Cedryl acetate, dist., dms. ... lb. 4.25 5.30
Celery seed, Indian, bgs. ... lb. .48 .49
Celery seed oil ... lb. 50.00 56.00
Cellulose acetate, powd., bgs., t.l., dlvd. E. ... lb. 1.90 -
Cellulose acetate butyrate, powd., 17% butyl content, bgs., t.l., dlvd. E. ... lb. 1.75 -
38% butyl content, bgs., dlvd. E. . lb. 1.59 -
50% butyl content, bgs., dlvd. E. . lb. 1.81 -
55% butyl content, bgs., dlvd. E. . lb. 1.83 -
Cellulose gum, pure, high vis., bgs., 24,000-lb. lots or more works, f.o.b. Hopewell, Va. ... lb. 1.60 1.70
std., low or medium vis., bgs., c.l., t.l., f.o.b. Hopewell, Va. ... lb. 1.80 1.90
Cerium concentrate CeO_2, 50 lbs. ... lb. 1.35 -
Cerium hydroxide 90% CeO_2, dms., works ... lb. 5.40 -
77% CeO_2, dms., works ... lb. 4.20 1.60
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd. ... lb. 1.85 1.90
Cetyl alcohol, NF, cns., c.l., t.l., dlvd. E. lb. .68½ 1.27
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian, cs. . lb. 4.25 4.50
Roman, cs. ... lb. 4.94 -
Egyptian, whole ... lb. 2.70 3.00
Chamomile oil, blue, Egyptian ... lb. 545.00 -
blue, Hungarian ... lb. 370.90 -
Chenopodium oil, NF, cns. ... lb. 15.00 -
Chicago acid, dry, bbls., frt. alld. ... lb. 16.60 -
Chilies (see Pepper, red).
Chlorendic anhydride, tech., dms., t.l., works ... lb. 1.30 -
Chlorinated paraffin, 40% chlorine, bulk, dlvd., Zone 1 ... lb. .45 .46½
50% chlorine, same basis ... lb. .46 .47½
60% chlorine, same basis ... lb. .46½ .48½
70% chlorine, resinous, 50-lb. bgs., c.l., dlvd., Zone 1 ... lb. .69 -

CHEMICAL PRICES

WEEK ENDING AUGUST 29, 1986

Chlorinated paraffin, Zone 2 prices are 1c. per lb. higher and Zone 3 prices are 2c per lb. higher and t.l. drum prices are 5c per lb. higher

Chlorinated rubber, 5, 10, 20 cps., bgs, t.l., divd. ....lb.	1.69	–
40 cps, bgs., t.l., divd. ....lb.	1.92	–
125 cps., bgs., t.l., divd. ....lb.	2.60	–
300 cps., bgs., t.l., divd. ....lb.	2.75	–
Chlorine, tanks single units works, f.o.b., frt. equald. ....ton	195.00	200.00
Chloroacetic acid, mono, high purity, flake, 99% bulk f.o.b. works ....lb.	.59	–
2-Chloro-4-aminotoluene, tech., liq., dms., c.l., t.l., f.o.b. works ....lb.	1.99	–
o-Chloroaniline, liquid, dms., c.l., f.o.b. works ....lb.	1.63	–
tanks, same basis ....lb.	1.55	–
p-Chloroaniline, solid, c.l., t.l., f.o.b. ....lb.	1.70	–
flake, dms., c.l., same basis ....lb.	2.00	–
o-Chlorobenzaldehyde, dms., t.l., works ....lb.	2.45	–
p-Chlorobenzaldehyde, dms., 2,000 lbs. or more, works ....lb.	3.94	3.65
o-Chlorobenzoic acid, dms. t.l. wks. ....lb.	3.90	–
p-Chlorobenzoic acid, dms., 500-lb. lots or more, works ....lb.	1.69	2.25
Chloroform, tech. tanks, distr. divd. ....lb.	.34½	–
tech., consumers, tanks, divd. ....lb.	.34½	–
NF tanks, min., consumer, 4,000 gals. divd. ....lb.	.35½	–
2-Chloro-4-nitroaniline, paste, commodity basis, dms., t.l., f.o.b. ....lb.	3.09	–
powd., same basis ....lb.	8.15	–
4-Chloro-2-nitroaniline, paste, 172.5 mol. wt., commodity basis, dms., t.l., f.o.b. ....lb.	2.25	–
powd., same basis ....lb.	2.70	–
o-Chlorophenol, dms., c.l., frt. equald. ....lb.	2.00	2.40
p-Chlorophenol, dms., c.l., frt. equald. ....lb.	1.25	1.70
Chloropicrin, coml., 1,500-lb. cyls., t.l., f.o.b. works ....lb.	1.25	–
Chlorosulfonic acid, tanks, frt. equald ....lb.	.18½	–
p-Chlorotoluene, tech., tanks, works ....lb.	1.00	–
Cholecalciferol, dry, 40,000,000 units per gram, kilo lots ....gm.	24.00	–
Choline bitartrate, cryst., 98% min., 50 kilo dms., f.o.b. Springfield, Mo. ....kilo	9.90	–
Choline chloride, feed grade, 70% aqueous, t.c., t.t., divd. E of Rockies ....lb.	.28	–
80% dry supplement ....lb.	.39	–
Choline chloride, 60% dry supplement, bulk hopper cars ....lb.	.39	–
bgs., 50,000 lbs. min. ....lb.	.40	–
Choline chloride, pharmaceutical, 50 kilo, lots, f.o.b. Springfield, Mo. ....kilo	5.00	–
Choline dihydrogen citrate, 98% min., 50 kilo lots, f.o.b. Springfield, Mo. ....kilo	8.00	–
Chrome green, CP extra light, bgs., divd. E. of Rockies ....lb.	1.68	–
light, bgs., same basis ....lb.	1.70	–
medium, bgs., same basis ....lb.	1.72	–
extra deep, CP., same basis ....lb.	1.74	–
Chrome orange, CP, bgs., divd. E. of Rockies ....lb.	.83	.89
Chrome yellow CP bbls., divd. E. of Rockies ....lb.	1.09	1.18
Chromic acid, 99¾%, flake dms., c.l., frt. equald ....lb.	1.18	–
grd., same basis ....lb.	1.25	–
Chromium acetate, soln., 7½%, dms., 600-2,000-lb. lots, works ....lb.	.10	–
Chromium fluoride, dms., t.l., works ....lb.	.81	–
Chromium nitrate, dms., t.l., f.o.b. ....lb.	1.45	–
10% metal soln., 500-lb. dms. same basis ....lb.	.74	.86
Chromium oxide, hydrated, 50-lb. bgs., c.l. ....lb.	5.50	–
pure, bgs., c.l. ....lb.	1.90	2.00
Cinnamic aldehyde, cns., dms. ....lb.	1.85	2.45
Cinnamic alcohol, 25-lb. cns. ....lb.	4.50	–
Cinnamon, H2 ....lb.	1.05	1.10
Cinnamon bark oil, bots. ....lb.	88.00	95.00
Cinnamon leaf oil, dms. ....lb.	2.80	–
Citral, nat., dms. ....lb.	8.50	9.85
syn., 55-gal. dms. f.o.b. ....lb.	3.18	–
Citric acid, USP, hydrous, gran., 250-lb. dms., t.l. ....lb.	1.18	–
Citric acid, USP, anhyd., gran. 250-lb. dms., t.l., del. ....lb.	.86	–
Citric acid anhyde, powder 5c. higher		
Citronella oil, Ceylon, dms. ....lb.	2.12	2.24
Java, dms. ....kilo	4.50	–
China, dms. ....kilo	4.30	–
Citronellal, 25-lb cans ....lb.	3.85	7.40
Citronellol drums, f.o.b. ....lb.	8.68	–
Citronellyl acetate, dms. ....lb.	5.50	6.50
Citronellyl formate, 25-lb. cns. ....lb.	8.85	–
Civet, artif., bots. ....lb.	20.00	–
nat. ....kilo	500.00	–
Clay ball, dom. air floated, bgs., c.l., Tenn. ....ton	49.00	–
dom., crushed, moisture-repellent, bulk, c.l., Tenn. ....ton	24.00	–
Clay China (see Kaolin).		
Cleaners, naphtha, 140° flash tanks., New Jersey or New York, divd. ....gal.	1.40	–
Clove leaf oil Indonesian, reg. dms. ....kilo	2.85	3.25
Madagascar, reg. ....lb.	4.20	–
Clove bud oil ....kilo	24.00	–
Cloves, Brazil ....lb.	2.20	–
Zanzibar ....lb.	4.20	–
Madagascar ....lb.	2.20	–

CMC, technical, 98% minimum, low or medium vis., bgs., 24,000 lbs., f.o.b. Hopewell, Va., 100% basis ....lb.	1.25	–
detergent makers, f.o.b. manufacturing point ....lb.	.94	–
CMC, purif., high vis., (see Cellulose gum).		
Coaltar pitch, indust., liq., works ....ton	250.00	255.00
roofing, 140-155, Federal specification RP-391 Type 1, bulk works ....ton	350.00	–
Cobalt acetate, dms., t.l., frt. alld. ....lb.	3.61	4.25
Cobalt carbonate, powd., dms., frt. alld. ....lb.	9.91	9.19
Cobalt chloride, dms., 5,000 lbs. or more, ft. equald ....lb.	4.15	–
Cobalt hydrate, dms., t.l., frt. alld. ....lb.	6.20	10.55
Cobalt metal, 99.5-99.9%, 250-kilo, dms., f.o.b. NY, Chicago. ....lb.	11.70	–
Cobalt naphthenate, liq., 9% Co., dms., divd. ....lb.	2.06	–
Cobalt nitrate, dms., t.l., frt. alld. ....lb.	2.74	9.45
Cobalt oxide, imp., black, 72-73% Co. ....lb.	9.61	–
Cobalt oxide, imp., 70-71% Co. ....lb.	9.79	–
Cobalt phosphate powd. 32.1% Co., dms., divd. ....lb.	1.35	–
Cobalt resinate fused, 9% Co., dms. ....lb.	.39½	–
Cobalt sulfate, cryst., bgs., 10,000 lbs. or more, frt. alld. E. ....lb.	2.91	3.54
monohydrate, dms., frt. alld. ....lb.	4.56	6.02
Cobalt tallate, 6% Co., dms., divd. ....lb.	2.19	–
Cocillana bark, bls. ....lb.	.40	.45
Cocoa butter, spot ....lb.	2.10	–
Coconut oil (See Oils, Fats & Waxes market report.).		
Coconut oil acids, distilled, t.c., f.o.b. ....lb.	.52	.56
double distilled, same basis ....lb.	.54	.63
Cod oil, f.o.b., Gloucester, Mass., bulk ....gal.	6.50	–
Codeine alkaloid, NF, 25-kilo lots ....kilo	900.00	–
Codeine phosphate, USP, cns., 25-kilo lots ....kilo	640.00	–
Codeine sulfate, NF cns., 25-kilo lots ....kilo	775.00	–
Cod liver oil, NF, dms. ....gal.	9.50	7.25
Copaiba balsam, dms. ....lb.	1.50	–
Copaiba oil, cns., dms. ....lb.	3.75	–
Copper acetate, monohydrate, cryst., tech., dms., t.l., works ....lb.	.71	.74
Copper bromide, (cupric) 200-lb. dms., 100,000-lbs. -per-year contracts, works ....lb.	1.34	–
Copper carbonate, 55% Cu, dark, dense, 50-lb. bgs., c.l., t.l., works ....100 lbs.	109.30	–
light, fluffy, 50 lb. bags, c.l., t.l., works ....100 lbs.	109.30	–
Copper chloride (cupric), anhyd., c.l., works ....lb.	.90	–
Copper cyanide, tech. dms., 24,000-lb. lots or more ....lb.	2.30	2.62
Copper fluoborate, (cupric), liq. conc., dms., t.l., works, frt. equald ....lb.	.62	–
Copper gluconate, FCC grade, 25-lb. dm., frt. equald ....lb.	9.50	–
Copper metal electrolytic wire bars, divd., domestic basis ....lb.	.62½	–
Copper naphthenate, liq., 9% Cu., dms., frt. alld ....lb.	1.19	–
Copper nitrate (cupric), purif., flake, dms., t.l., works ....lb.	.43¼	–
Copper oleate, solid, 6% Cu. dms., works frt alld ....lb.	.87	–
Copper oxide, black (cupric), dms., 60,000-lb. lots, works ....lb.	1.21	–
red (cuprous), dms., 97%, USN Type 1, (AA), 90,000-lb. lots, works ....lb.	1.19	1.20
red, 90%, Type 2, same basis ....lb.	1.18	–
Copper-8-quinolinolate, 10%, liq. emulsion, t.l., divd. ....lb.	2.52	–
Copper sulfate, cryst., pentahydrate, 98% bgs., c.l., f.o.b. works ....100 lbs.	46.45	–
CP, pentahydrate, cryst., dms., l.c.l., works ....100 lbs.	90.00	–
monohydrated, 95% Cu, dms., c.l., works ....100 lbs.	75.10	–
basic, bgs., c.l., works ....100 lbs.	89.90	–
Coriander oil, USP, dms. ....lb.	22.00	28.00
Coriander seed Moroccan ....lb.	.38	–
Rumanian ....lb.	.35	–
Corn oil (See Oils, Fats & Waxes market report).		
Corn oil, crude, foots (soapstock), 95% acid; New York ....lb.	.13½	.14
Corn oil acid, dms. ....lb.	.50	–
tanks ....lb.	.82	.40
Corn syrup 43 Be., tanks, f.o.b. works ....100 lbs.	11.22	11.43
Cortisone acetate, USP, dms., 5 kilos or more ....gram	.60	–
Cottonseed meal (See Oils, Fats & Waxes market report.)		
Cottonseed oil (See Oils, Fats & Waxes market report.)		
Cottonseed oil, acidulated (soap stock), acid, 95%, tanks, N.Y. ....lb.	.13	–
Cottonseed oil acids, dist., dms. ....lb.	.63	–
tanks ....lb.	.56	–
Coumarin, NF X, cryst., over 600-lb. lots ....lb.	6.00	6.20
Cream of tartar (see Potassium bitartrate).		
Creosote, coaltar, grade 1, tanks, f.o.b. works ....gal.	1.15	1.16
soln., 80/20, tanks, same basis ....gal.	1.134	1.17
p-Cresidine, fused, dms., works ....lb.	4.81	–
m-Cresol, 95-98%, dms., t.l., f.o.b. ....lb.	1.71	–
tanks, same basis ....lb.	1.65	–
m,p-Cresol, 99%, dms., t.l., f.o.b. ....lb.	.94	–
bulk, same basis ....lb.	.82	–
o-Cresol, 99% pure, dms., t.l., f.o.b. ....lb.	.87	–
bulk, same basis ....lb.	.75	–
98% pure, dms., t.l., f.o.b. ....lb.	.87	–
bulk, same basis ....lb.	.76	–
p-Cresol, 98%, dms., t.l., f.o.b. ....lb.	1.22	–
bulk, same basis ....lb.	1.15	–
Cresylic acid, coaltar, dom., metapara content above 25%, resin and tricresyl phosphate grades, tanks, frt. alld ....lb.	.56	–
Cresylic acid, dom., metapara content 25% or less, tanks, frt. alld. ....lb.	.55	–
Crotonic acid, 200-lb. dms., t.l., f.o.b. divd. ....lb.	1.60	–
Cryolite syn., bulk, c.l., works ....ton	610.00	650.00

Cuba root, powd., 5% rotenone, basis, 50-lb. bgs., t.l., works ....lb.	.60	–
Cumene, bulk, contract, f.o.b. ....lb.	.14	.14
Cumin seed, Indian, bgs. ....lb.	.92	.95
Cyanuric acid, dms., c.l., t.l. frt. equald ....lb.	1.16	1.37
Cyclamen aldehyde, 50% min. aldehyde content, dms. ....lb.	4.65	–
98.5%, dms ....lb.	7.35	9.20
90-92%, dms. ....lb.	7.65	–
Cyclohexane, bulk, barges, wks ....gal.	.926450	.936450
Cyclohexanol tech., tanks, f.o.b. ....lb.	.52	.96½
Cyclohexanone tech., tanks, f.o.b. works ....lb.	.55½	.59½
tanks, divd. ....lb.	.585	–
Cyclohexylamine, tech., tanks, works ....lb.	.05	–

D

2,4-D acid, tech., 60-lb. bgs., c.l., t.l., works, frt. equald ....lb.	1.10	1.25
2,4-D butyl ester, tech., 55-gal. dms., c.l., t.l., works, frt. equald ....lb.	1.30	–
tanks, same basis ....lb.	1.25	–
2,4-D dimethylamine salt, t.c., t.t. works, frt. alld ....gal.	9.05	–
Decyl alcohol, mixed isomers, tanks, divd ....lb.	.32	–
perfume grade, dms. ....lb.	.75	–
Defluorinated phosphate (tricalcium), feed grade, 19% P. c.l., bulk, f.o.b. works ....ton	195.00	229.00
Denatured alcohol, ethyl, CD18, CD19, tanks, divd. E. ....gal.	1.87	–
NOTE: Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.		
Denatured alcohol, ethyl,		
SD2B, tanks, divd. E. ....gal.	1.91	–
SD3A, tanks, divd. E. ....gal.	1.79½	–
SD23A, tanks, divd. E. ....gal.	1.98	–
SD23H, tanks, divd. E. ....gal.	1.89	–
SD29, tanks, divd. E. ....gal.	1.93	–
SD30, tanks, divd. E. ....gal.	1.72½	–
SD35A, tanks, divd. E. ....gal.	1.96½	–
Denatured alcohol, ethyl, brucine formula SD40, tanks, divd. E. ....gal.	1.83	–
ethyl, optional formula, SD40, tanks, divd. E. ....gal.	1.82½	–
For anhyd. alcohol on above formulas, prices are 12c. per gal. higher.		
West Coast divd. prices are the same as Eastern prices, except in Idaho, Oregon and Washington where a 5c. differential on tankcars is maintained.		
Desoxyephedrine hydrochloride (See Methamphetamine hydrochloride)		
Detergent alkylate, straight chain dodecylbenzene, tanks, barges, f.o.b. ....lb.	.45	–
Dextrin, corn, canary dark, paper bgs., c.l., works ....100 lbs.	29.04	–
white, paper bgs., c.l., works ....100 lbs.	27.43	–
Dextrose, anhyd., coml., bgs., c.l., divd. New York ....100 lbs.	41.10	–
USP special, 100-lb. bgs., c.l., divd. New York ....100 lbs.	48.60	–
Dextrose, hydrated coml, bgs., c.l., divd. New York ....100 lbs.	24.25	–
Western zone ....100 lbs.	25.90	–
Diacetone alcohol, acetone free, tanks, divd. ....lb.	.52	–
Diacetyl, flavor grade, dms. ....lb.	9.26	15.00
Diammonium phosphate, fert. grade, min. 18% N, 46% P. bulk, c.l., f.o.b. Fla. works ....ton	140.00	145.00
Diammonium phosphate, feed grade, 18% N, 20% P, bulk, c.l., f.o.b. Fla. works ....ton	240.00	–
bgs., same basis ....ton	260.00	–
Diammonium phosphate, tech., bgs., c.l., t.l., works, frt. equald ....100 lbs.	52.60	–
food grade, bgs., c.l., t.l., same basis ....100 lbs.	57.75	–
2,4-Di-tert-amylphenol, min. 95.5%, dms., c.l., t.l., works ....lb.	1.04	–
tanks, works ....lb.	.97	–
Diarylide yellow, DT, (yellow 14), dms., frt. alld ....lb.	6.20	–
o-Dianisidine dihydrochloride, 100%, MW 244, dms., t.l., divd. ....lb.	4.25	–
2,6-Di-tert-Butyl-p-Cresol (see Butylated hydroxytoluene)		
Dibutyl fumarate, tanks, f.o.b. works ....lb.	.70	.75
Dibutyl maleate tanks, f.o.b. works ....lb.	.81	–
Dibutyl phthalate, tanks, works ....lb.	.56	.54
Dibutyl sebacate tanks, works ....lb.	1.66	1.65
Dibutylamine, dms., c.l., divd. ....lb.	1.12	–
tanks, same basis ....lb.	1.08	–
Dicapryl phthalate tanks, frt. alld. E. ....lb.	.36	.37
2-5-Dichloroaniline, flake, dms., works ....lb.	2.00	–
fused, dms., works ....lb.	1.80	–
3,4-Dichloroaniline, tech. 88%, solid, dms., c.l., t.l., f.o.b. works ....lb.	1.46	1.57
o-Dichlorobenzene, tech., 90%, dms., c.l., t.l., divd. ....lb.	.52	–
tanks, same basis ....lb.	.46	–
98% refd., dms., c.l., same basis ....lb.	.54	–
tanks, same basis ....lb.	.47	–
p-Dichlorobenzene, graded, 300-lb. dms., t.l., f.o.b., frt. equald. ....lb.	.51	.52
tanks, liq., same basis ....lb.	.49	.47
2,6-Dichloro-4-nitroaniline, dms., 10,000 lbs. or more, works ....lb.	3.80	–
Dichlorophenoxyacetic acid (see 2,4-D).		
Dicyclohexylamine, dms., c.l., t.l., f.o.b. ....lb.	1.35	–
tanks, same basis ....lb.	1.25	–
Dicyclohexyl phthalate, bgs., c.l., t.l., divd. ....lb.	1.25	–
Dicyclopentadiene, high-purity, 97-98%, tanks, works ....lb.	.55	–
Diethanolamine, tanks, frt. alld. ....lb.	.44	.47
Diethanolamine lauryl sulfate, tanks, frt. alld. ....lb.	.41	–
DDVP (see Dimethyl dichlorovinyl phosphate).		

Diethyl barbituric acid (see Barbital).		
Diethyl carbonate, tankwagons, f.o.b. works ....lb.	1.40	–
Diethyl ethanolamine, CP dms., c.l., divd ....lb.	1.19	–
tanks, divd ....lb.	1.10	–
Diethyl ethanolamine tech., 8c per lb. lower.		
Diethyl oxalate, dms., c.l., f.o.b. works ....lb.	1.80	–
Diethyl phthalate, tanks, f.o.b. ....lb.	.62	.65
odorless cosmetic grades, t.l., works ....lb.	.57½	–
Diethyl sulfate, tanks, frt. alld E. ....lb.	.59	–
Diethyl thiourea, dms., c.l., t.l., works ....lb.	2.46	–
Di-2-ethylhexyl adipate (see Dioctyl adipate).		
Diethyl toluamide, 95-97% min. meta isomer, dms., t.l., f.o.b. works ....lb.	2.75	–
N,N-Diethyl-m-toluidine, tech., liq., dms., c.l., f.o.b. ....lb.	3.19	–
tanks, same basis ....lb.	3.10	–
Diethylamine, dms., c.l., divd. ....lb.	1.15	–
tanks, same basis ....lb.	1.02	–
N,N-Diethylaniline, dms., c.l., t.l., f.o.b. works ....lb.	1.83	–
tanks same basis ....lb.	1.75	–
Diethylbenzene, tanks, f.o.b. works ....lb.	.98	–
Di-2-ethylhexyl azelate (see Dioctyl azelate).		
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).		
Diethylene glycol, tanks, divd. E. ....lb.	.29½	.31½
Diethylene glycol monobutyl ether, dms., c.l., frt. alld. E. ....lb.	.65	–
tanks, frt. alld. E. ....lb.	.57	–
Diethylene glycol monoethyl ether, dms., c.l., frt. alld E. ....lb.	.64	–
tanks, frt. alld. E. ....lb.	.56	–
Diethylene glycol monomethyl ether, dms., c.l., frt. alld. ....lb.	.62	–
tanks, frt. alld. ....lb.	.54	–
Diethylene glycol monobutyl ether acetate, dms., c.l., divd. E. ....lb.	.80	–
tanks, divd. E. ....lb.	.72	–
Diethylene glycol monoethyl ether acetate, dms., c.l., frt. alld. E. ....lb.	.80	–
tanks, frt. alld. ....lb.	.72	–
Diethylenetriamine, tanks, f.o.b. works ....lb.	1.80	[illegible]
Diethylenetriamine pentaacetic acid, pentasodium salt solution, tank-cars/tanktrucks, frt-equalized ....lb.	.45	–
Digitoxin, USP, imp., bots. ....gram	2.80	3.00
Diglycol laurate, dms., ton lots ....lb.	.32½	–
Diglycol stearate, dms., t.l. ....lb.	.62	.73
Dihydrazine sulfate, dms., works ....lb.	1.10	1.25
Dihydrostreptomycin sulfate, bulk ....kilo	48.00	–
Dihydroxyacetone, 50-kilo lots, works ....kilo	40.00	–
Di-isobutyl ketone, tanks, divd ....lb.	.60	–
Di-isobutyl phthalate tanks, divd E. ....lb.	.55	.57
Di-isobutylene, tanks, f.o.b. Houston ....lb.	.37	–
Di-isodecyl phthalate, tanks, divd ....lb.	.39½	–
Di-isononyl phthalate, tanks, divd. ....lb.	.41	–
Di-iso-octyl azelate, tanks, divd. E. ....lb.	.90	–
Di-iso-octyl phthalate, tanks, divd. ....lb.	.41	–
Di-isopropanolamine, dms., c.l., frt. alld. ....lb.	.66½	–
tanks, same basis ....lb.	.58½	–
Di-isopropylamine, dms., c.l. divd. ....lb.	1.17	–
tanks, same basis ....lb.	1.07	–
Dilauryl 3,3-thiodipropionate, dms., t.l., frt. alld ....lb.	1.89	–
Dill oil, USP, dms. ....lb.	7.00	6.25
Dimethyl anthranilate, dms ....lb.	15.80	–
Dimethyl benzyl carbinyl acetate, 25-lb. dms. ....lb.	8.95	–
Dimethyl carbonate, dms, t.l., f.o.b. works ....lb.	.80	–
Dimethyl dichlorovinyl phosphate, 55-gal. dms., f.o.b. ....lb.	1.80	1.90
Dimethyl ethanolamine, anhyd., dms., c.l., divd. E. ....lb.	1.15	1.16
tanks, divd. E. ....lb.	1.07	1.10
Dimethyl ether, aerosol grade, tanks, divd ....lb.	.38	–
Dimethyl phthalate, tanks, f.o.b. works ....lb.	.65	–
Dimethyl sebacate, tanks, f.o.b. works ....lb.	2.26	2.56
Dimethyl sulfate, ref. dms., c.l., f.o.b. works ....lb.	.87	–
tanks ....lb.	.46	–
Dimethyl sulfide, tanks, works ....lb.	1.09	1.20
Dimethyl sulfoxide, tanks, works ....lb.	.76	–
Dimethylacetamide, bulk f.o.b. ....lb.	.87½	–
Dimethylamine, 25% soln., tanks, frt. equald., 100% basis ....lb.	.63½	–
40% soln., tanks, frt. equald., 100% basis ....lb.	.63½	–
anhyd., tanks, frt. equald. ....lb.	.54½	–
N,N-Dimethylaniline, t.l., f.o.b. ....lb.	1.03	–
t.l. dms. ....lb.	1.11	–
N,N-Dimethylformamide, dms., c.l., t.l., f.o.b., works ....lb.	.57	–
tanks, same basis ....lb.	.49	–
2,4-Dinitroaniline, tone-lots, f.o.b. ....lb.	1.22	–
Dinitroaniline, orange toner, CP, bgs., divd. E. of Rockies ....lb.	6.20	–
2,4-Dinitrochlorobenzene, crystallizing at 47°, t.l., f.o.b. Charlotte, N.C. ....lb.	.96	–
2,4-Dinitrophenol, 250-lb. dms., f.o.b. Charlotte, N.C. ....lb.	1.85	–
Dinitrotoluene, mix., tech. f.o.b. works ....lb.	.30	[illegible]
2,4-Dinitrotoluene, dms., c.l., t.l., works ....lb.	1.25	–
tanks, works ....lb.	1.20	–
Dioctyl adipate, tanks, frt. alld. E. ....lb.	.65	.67
Dioctyl azelate, tanks, divd. E. ....lb.	.90	[illegible]
Dioctyl phthalate, tanks, divd. ....lb.	.40	[illegible]
Dioctyl sebacate, 89%, tanks, f.o.b. works ....lb.	1.29	[illegible]
1,4-Dioxane, tanks, frt. alld. E. ....lb.	1.13	–
t.l., same basis ....lb.	1.21	–
Dipentaerythritol, bgs., c.l., t.l., divd. E. ....lb.	1.42	–
Dipentene steam-dist., tanks, f.o.b. Fla. works ....lb.	.26	[illegible]
sulfate turpentine derived, tanks ....lb.	.25	[illegible]
Dip oil (see Tar acid oil).		
Diphenhydramine hydrochloride, USP, dom., 1,000-kilo lots, dms., divd. ....kilo	20.00	24.00
Diphenyl, 99.9%, bgs., c.l., t.l., works ....lb.	.74	–
tanks, works ....lb.	.65	–

Diphenyl oxide, tech. grade, tanks ....lb.	1.11	1.20
Diphenylamine, refd., flake, bgs., t.l., works, frt. equald ....lb.	1.25	–
molten, tanks, works ....lb.	1.00	–
octylated, flake, bgs., t.l., f.o.b. works ....lb.	7.89	–
Diphenylguanidine, bgs., t.l., frt. alld ....lb.	2.52	–
Diphenylhydantoin-sodium USP, dms ....lb.	5.00	5.60
Diphenylmethane 4,4-di-isocyanate, polymeric, bulk, c.l., min. frt. alld ....lb.	.91	–
Dipropylene glycol, tanks, frt. alld. ....lb.	.45	–
Dipropylene glycol monomethyl ether, dms., c.l., divd. ....lb.	.54	–
tanks, same basis ....lb.	.49	–
Di-o-tolylguanidine, powd., dms., t.l., frt. alld ....lb.	2.92	–
Di-o-tolylthiourea, tech., solid, dms., t.l., frt. alld ....lb.	3.11	–
Ditridecyl phthalate, tanks, divd ....lb.	.60	.63
Diundecyl phthalate, tanks, divd. ....lb.	.59	–
Divinylbenzene, 100% basis, tanks works ....lb.	2.75	2.50
dms. 100% basis ....lb.	3.00	2.70
1-Dodecanol, syn., tanks, f.o.b. ....lb.	.76½	–
Dodecenyl succinic anhydride, dms., c.l., t.l., divd ....lb.	.89	–
Dodecylbenzene (see Detergent Alkylate).		
Dodecylphenol, tanks, min. frt. alld. E ....lb.	.49	.53
Dyes, coaltar, certified colors for food, drugs and cosmetics, 100 lb. and over. frt. prepaid or alld.		
Blue, FD&C, No. 1 ....lb.	21.20	22.80
No. 2 ....lb.	29.15	29.22
Green, FD&C, No. 3 ....lb.	49.50	95.00
Red, FD&C, No. 3 ....lb.	24.00	24.50
Yellow, FD&C, No. 6 ....lb.	7.45	7.85
No. 6 ....lb.	6.45	6.75
Dyes, coaltar, certified colors for drugs and cosmetics. 100-lb. lots divd.		
Green, D&C, No. 5 ....lb.	39.50	–
No. 6 ....lb.	42.80	–
Red, D&C, No. 4 ....lb.	18.85	–
No. 17 ....lb.	39.90	–
No. 19 ....lb.	38.25	–
No. 22 ....lb.	12.45	–
No. 28 ....lb.	59.95	–
No. 33 ....lb.	48.95	–
Yellow, D&C, No. 7 ....lb.	21.00	–
No. 8 ....lb.	20.55	–
No. 10 ....lb.	49.80	49.95
No. 11 ....lb.	35.25	–
Dyes, coaltar, for general use in cloth and paper dyeing (by Color Index Name), f.o.b. works		
A Bk 1 Blue black ex conc. ....lb.	5.75	–
Dyes, A Bl 9 Blue 2G ....lb.	5.48	–
A Bl 45 Alizarine Blu SAP 150% ....lb.	19.85	–
A Bl 90 Alizarine Br. Cy G ....lb.	14.13	–
A Bl 113 Navy 5R ....lb.	8.55	–
A Gr 16 Fast 2G 333% ....lb.	22.12	–
A Or 7 II ....lb.	3.72	–
A Or 8 RO Ex. Conc. ....lb.	4.00	–
A Or 10 Wool Or G ....lb.	4.30	–
A Or 74 Metallized Or GNA ....lb.	8.15	–
A R 26 ....lb.	5.13	–
A R 14 Azo Rubine 133% ....lb.	9.65	–
A R 18 Scarlet 4R Conc. ....lb.	5.46	–
A R 88 Fast Red A Conc. ....lb.	8.85	–
A R 151 Silk Red 3B Conc. ....lb.	4.60	–
A V 17 6BNS Conc. ....lb.	8.75	–
A V 49 4BNS Conc. ....lb.	12.22	–
A Y 17 Fast Light Yell 2G ....lb.	6.69	–
A Y 23 Tartrazine Ex Conc. ....lb.	6.18	–
B Bl 9 Zinc Free ....lb.	10.40	–
B Br 4 Bismark Brown R Ex. Conc. ....lb.	4.42	–
B G 1 Jade Crystals ....lb.	9.55	–
B Gr 4 Malachite Green Crystal ....lb.	6.90	–
B V 1 Methyl Violet Crystals ....lb.	8.80	–
B V 10 Rhodamine B Ex. ....lb.	10.95	–
B Y 2 Bond Yell SFA 150% ....lb.	10.10	–
D Bl 1 Sky Blue 6B Conc. ....lb.	4.02	–
Ex. Conc. 300% ....lb.	0.26	–
D Bl 8 Azurine G Conc. ....lb.	0.45	–
D Bk 22 Fast Black GR ....lb.	2.65	–
Fast Black GR 150% ....lb.	4.28	–
D Br 230 Resin Fast Brown BRNS 200%	7.23	–
D Gr 26 Resin Fast Green GL ....lb.	8.15	–
D R 24B Ex. Conc. ....lb.	7.06	–
D R 31 Brilliant Red 12B Conc. ....lb.	6.16	–
D R 80 Fast Red 8BLN ....lb.	6.15	–
D R 81 Paper Red 8BLP ....lb.	0.05	–
D R 251 Fast Scarlet AV ....lb.	6.28	–
D Or 102 Fast Orange WSP Liq. ....lb.	2.47	–
WS. Conc. 150% ....lb.	11.28	–
D Y 4 Brilliant Paper Yell 3GX 125% ....lb.	4.69	–
Brilliant Paper Yell 3GX Liq. ....lb.	1.75	–
D Y 11 Stilbene Yellow GA. Ex. Conc. ....lb.	3.03	–
D Y 41 Fast Yellow RGL Conc. 200%		
D Y 27 Resin Fast Yellow L5G ....lb.	8.75	–
Dis R 1 Scarlet BA ....lb.	14.40	–
Dis R 91 Pink REL 200% ....lb.	4.26	–
Dis Y 3 Yellow G ....lb.	21.00	–
Dis Y 54 Yellow 3G ....lb.	3.65	–
Dis Or 3 Orange GRA ....lb.	8.94	–
Dis Or 37 Orange OB ....lb.	4.81	–
Dis V 1 4RN Paste ....lb.	8.77	–
Dis V 26 Bordeaux 8V 200% ....lb.	7.95	–
Dis Bl 27 Blue 8GLF ....lb.	17.25	–
Dis Bl 102 Blue GFOA 300% ....lb.	10.05	–
50% Paste ....lb.	22.80	–
V G 1 Jade Green Double Paste ....lb.	4.10	–
V Bk 25 Olive TA Paste ....lb.	5.50	–
	5.85	–

E

Endrin, tech., 95-99%, dms., t.l. ....lb.	7.00	–
Ephedrine, syn. anhyd., USP, 80-oz. lots ....oz.	1.25	–
Ephedrine hydrochloride, NF, cryst., less than 1,000 kg. ....kilo	36.25	40.25
Ephedrine sulfate, USP, cryst., dms., less than 1,000 kilos ....kilo	43.00	45.25
Epichlorohydrin, tanks, divd. ....lb.	.86	–

Epinephrine base, syn., USP, bots., 100-gram lots ....gram	.60	–
Epoxy resin, liquid, bulk tanks, divd. ....lb.	1.31	1.41
Solid, bgs., t.l. ....lb.	1.29½	1.33½
Epsom salt (see Magnesium sulfate).		
Erythorbic acid, powd., gran., 100 lb. dms., t.l. or mixed t.l. f.o.b. works ....lb.	4.10	4.25
Ester gum, gum-rosin type, dms., c.l., divd., Ill., Md., Ky., E. States, Minneapolis, N.C., Ohio, St. Louis, St. Paul, Va., W. Va. ....lb.	.75	–
Ester gum, wood-rosin type, dms., c.l., same basis ....lb.	.49	.46
Ethyl acetate, syn., 95-89%, tanks, divd. ....lb.	.41	.41½
99%, tanks, divd ....lb.	.41½	.42½
Ethyl acetoacetate dms., c.l., divd. ....lb.	1.13	–
tanks, divd. ....lb.	1.06	–
Ethyl acrylate, tanks, frt alld ....lb.	.99	–
Ethyl alcohol, syn., 190 pf., USP tax free, tanks, divd. E. ....gal.	1.55	–
Ethyl alcohol, absolute, 200 pf., tax free prices 12c. higher than 190 pf., tax free.		
Ethyl alcohol, fermentation, tanks, f.o.b. works ....gal.	1.06	1.28
Price range attributable to various state tax incentives.		
Ethyl alcohol, denat. (see Denatured alcohol, ethyl).		
Ethyl p-aminobenzoate, NF (see Benzocaine).		
Ethyl benzoate, dms. ....lb.	1.35	1.50
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E. ....lb.	.79	–
Ethyl butyrate, dms. ....lb.	1.35	1.50
Ethyl cellulose, standard vis., 7 cps. bgs., t.l., frt. equald. E. ....lb.	4.55	–
standard vis., 10, 20, 45, 100 cps., t.l., frt. equald. E. ....lb.	4.17	4.22
medium vis., 50, 70, 100 cps., t.l., frt. equald. E. ....lb.	4.26	–
USP vis., 7 cps bgs., t.l., frt. equald. E ....lb.	4.99	–
USP 10,20,45,100 bgs., t.l., frt. equald. E ....lb.	4.59	4.96
VSP (medium) 50,70,100 bgs., t.l., Frt. equald. E. ....lb.	4.51	–
Ethyl chloride. tech., cyls., frt. alld. ....lb.	.26	.29½
tanks, frt. alld. ....lb.	.24	.29½
Ethyl cinnamate, dms. ....kilo	41.00	–
Ethyl ethanolamines, mixed, dms., t.l., divd. E. ....lb.	1.23	–
tanks, divd. E. ....lb.	1.16	–
Ethyl ether, refined, tanks, f.o.b. ....lb.	.49	–
Ethyl hexanoate, dms. ....lb.	4.25	4.75
2-Ethylhexoic acid, dms., c.l., t.l., divd. E. ....lb.	.63	–
tanks divd. E. ....lb.	.57	–
2-Ethylhexyl acrylate, straight or mixed, tanks, frt. alld. E. ....lb.	.79.5	–
2-Ethylhexyl alcohol, tanks, divd. ....lb.	35	–
Ethyl iodide, cbys., works ....lb.	6.25	–
Ethyl linalool, syn 55-gal dms ....lb.	10.60	–
Ethyl linalyl acetate, syn., 55-gal dms ....lb.	10.65	–
Ethyl methacrylate, tanks, frt. equald. ....lb.	1.06	–
n-Ethyl morpholine, dms., t.l., frt. alld. ....lb.	2.00-	
tanks, same basis ....lb.	1.92	–
n-Ethyl-a-naphthylamine, dms., works ....lb.	1.04	–
Ethyl oxalate (see Diethyl oxalate).		
Ethyl parathion (see Parathion, ethyl).		
Ethyl silicate dist. (see Tetraethyl orthosilicate).		
Ethyl silicate, 40% available SiO_2, dms., t.l., f.o.b. works ....lb.	1.45	1.45
tanks, f.o.b. works. ....lb.	1.39	–
N-Ethyl-m-toluidine, tech., liq., dms., c.l., f.o.b. ....lb.	3.18	–
tanks, same basis ....lb.	3.10	–
N-Ethyl-o-toluidine, dms. ....lb.	2.85	2.90
Ethyl vanillin 100 lb. dms., 500 lbs. or more ....lb.	13.50	–
25 lb. dms., 500 lbs. or more ....lb.	13.75	–
100 lb. dms., less than 500 lbs. ....lb.	14.00	14.50
Ethylamine (see Mono-Di- and Tri-)		
N-Ethylaniline, dms., c.l., t.l., f.o.b. works ....lb.	1.66	–
tanks, same basis ....lb.	1.56	–
Ethylbenzene, bulk, f.o.b. Houston, Tex. ....lb.	.22	.23
Ethylene, contract, divd. ....lb.	.16	.16½
Ethylene brassylate, dms. ....lb.	16.00	18.25
Ethylenediamine, 99%, tanks, f.o.b. works ....lb.	1.30	1.305
Ethylenediamine dihydriodide ....lb.	7.65	8.25
Ethylenediamine tetraacetic acid, tetrasodium salt, soln., t.c., t.t., frt. equald ....lb.	.36½	–
Ethylene dibromide dms., c.l., frt., equald ....lb.	.36	.46
tanks, frt. equald ....lb.	.32	.42
Ethylene dichloride, tanks, f.o.b. works ....lb.	.17	.17¼
Ethylene glycol, indust., tanks, frt. alld. ....lb.	.31	–
Ethylene glycol, monobutyl ether, tanks, divd. E. ....lb.	.41½	–
Ethylene glycol monoethyl ether, tanks, divd. E. ....lb.	.51	–
Ethylene glycol monomethyl ether, tanks, divd. E. ....lb.	.34	–
Ethylene glycol monobutyl ether acetate, tanks, frt. alld. E. ....lb.	.64½	–
Ethylene glycol monoethyl ether acetate, tanks, frt. alld., E. ....lb.	.55½	–
Ethylene glycol monomethyl ether acetate, tanks, frt. alld. E. ....lb.	.43	–
Ethylene oxide, tanks f.o.b. ....lb.	.39	.46
Ethylene trichloride (see Trichloroethylene).		
Eucalyptol, NF, dms. Portuguese ....kilo	7.50	–
Eucalyptus oil, Portuguese NF, rectified, 70-75%, dms. ....kilo	5.50	–
NF, rectified, 80-85%, dms ....kilo	8.25	–
Eugenol, USP, dms. ....kilo	7.55	–

F

Fennel oil, sweet, USP, cns ....kilo	9.00	–
Fennel seed, Egypt ....lb.	.37	–
Indian ....lb.	.30	.32
Fenugreek seed, Indian, bgs. ....lb.	.25	.32
Ferric chloride anhyd., tech. 350-lb. dms., c.l., works ....100 lbs.	36.00	–
Ferric chloride, 42 Be, photo grade dms., c.l., works ....100 lbs.	9.10	–

Ferrichloride, sewage grade, 100 percent basis, f.o.b. works, tank works ....ton	179.00	255.00
Ferric nitrate, cryst., dms., t.l., f.o.b. ....lb.	.64	–
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works ....lb.	1.65	–
Ferric oxides (see Iron Oxides).		
Ferric phosphate, FCC insoluble powder, dms, 10,000 lbs. ....lb.	1.10	1.15
Ferric pyrophosphate, soluble, purif., pearls, 50-lb. dm. ....lb.	1.11	–
Ferric resinate, precip., 9.75% Fe. dms., ton lots frt. alld. ....lb.	.45	–
Ferric sulfate, partly hydrated, 100-lb. bgs., c.l., works ....ton	141.00	–
bulk, works ....ton	117.00	–
Ferric ammonium citrate, NF, brown, green gran. 100 lb. dms., 2,000 lb. min., f.o.b. shipping pt. ....lb.	2.00	2.99
2c. per pound surcharge for shipments W. of Denver		
Ferric-ammonium oxalate, fine gran., 250-lb. dms., t.l., f.o.b. works. E. ....lb.	.42	–
Ferric hydroxyethylene diaminetriacetic acid, industrial grade, sodium salt, soln., 4.5% Fe, t.c., t.t., f.o.b. works ....lb.	.55	–
agricultural grade, sodium salt solution, 5% Fe, t.c., t.t., f.o.b. works ....lb.	.64	–
Ferrous fluoborate liq. conc., dms., t.l., works, frt. equald ....lb.	.64	–
Ferrous gluconate, NF, t.l., works E. ....lb.	2.26	–
Ferrous naphthenate, liq., 6%, Fe. dms., divd. ....lb.	1.17	–
Ferrous sulfate, moist, bulk, t.l. f.o.b. works ....ton	30.00	–
heptahydrate, gran., bulk, t.l., f.o.b. works ....ton	145.00	150.00
monohydrate, gran., bulk, t.l., f.o.b. works ....ton	170.00	190.00
USP, powd., 400-lb. dms. ....lb.	.49	–
cryst., 250-lb. dms. ....lb.	.91	–
Fir oil, Canada dms. ....lb.	10.20	–
Siberia, dms. ....lb.	9.76	.75
Fish oil, refd., alkali, tanks, c.l. ....lb.	.29	–
kettle-bodied, tanks ....lb.	.92	.36
light, cold-pressed, dms., c.l. ....lb.	.94	–
tanks ....lb.	.26	–
Fishmeal, dom., menhaden, 90% protein grd., bulk, f.o.b. Atlantic port ....ton	295.00	–
f.o.b. Gulf port ....ton	290.00	–
imp., Chilean, 65% protein min., bulk, c.l., t.l., ex whse., f.o.b. Atlantic and Gulf ports ....ton	285.00	–
Fluoboric acid, dms, t.l., works, frt. equald ....lb.	.70	–
Fluorocarbon, No. 11 bulk, tanks, delvd. ....lb.	.57	.64
No. 12, bulk, same basis ....lb.	.66	.74
No. 22, bulk, same basis ....lb.	1.05	1.14
No. 113, bulk, same basis ....lb.	.89	.63½
No. 114, bulk, same basis ....lb.	1.02	1.08
Fluosilicic acid (see Hydrofluosilicic acid).		
Formaldehyde, 37% methanol free (uninhibited) divd., gulf ....lb.	.088	.0905
44-45% (1% methanol) tanks, divd ....lb.	.1015	.1065
37% (inhibited 7% methanol, divd ....lb.	.0945	.1025
37% (inhibited 11-15% methanol) tanks, divd. ....lb.	.1055	.1060
Formamide, tanks, f.o.b. ....lb.	.39	–
dms., same basis ....lb.	.44	–
Formic acid 90% tanks, f.o.b. works ....lb.	.36½	–
95% dms., c.l., works ....lb.	.51½	–
Fructose, cryst., 19,000 kilos or more, dms. ....lb.	.90	1.03
Fumaric acid, food grade, bgs. t.l., frt. equald. E. ....lb.	.76½	.77½
tech. grade, bgs., t.l., f.o.b. frt. equald ....lb.		.82½
Furfural, tanks, f.o.b. Cedar Rapids, Iowa, and Belle Glade, Fla. ....lb.	.75	–
Furfuryl alcohol, tanks, f.o.b. Memphis, Tenn. and Omaha, Neb. ....lb.	.72	–

G

G salt, dms., frt. alld. 100% basis ....lb.	2.30	–
Gallic acid, 400-kilo lots ....kilo	23.05	–
Garlic oil, dms., Egyptian ....kilo	85.00	105.00
Gelatin, edible, 100 AOAC test, dms., t.l., divd. ....lb.	1.50	1.75
125 AOAC test, dms., t.l. ....lb.	1.75	1.85
150 AOAC test, dms., t.l. ....lb.	1.85	1.95
175 AOAC test, dms., t.l. ....lb.	1.95	2.05
200 AOAC test, dms., t.l. ....lb.	2.05	2.15
225 AOAC test, dms., t.l. ....lb.	2.10	2.25
250 AOAC test, dms., t.l. ....lb.	2.20	2.35
275 AOAC test, dms., t.l. ....lb.	2.30	2.45
300 AOAC test, dms., t.l. ....lb.	2.50	2.65
Gentian violet (see Methyl rosaniline chloride).		
Geraniol, syn., 90-92%, dms. ....lb.	5.25	–
nat., 90-92%, dms. ....lb.	3.50	–
syn. 96-98%, dms. ....lb.	5.75	–
Geranium oil, Moroccan ....lb.	24.00	27.50
Bourbon ....lb.	33.00	38.00
Chinese ....kilo	57.00	85.00
Egypt ....lb.	55.00	–
Turkish (see Palmarosa oil)		
Geranyl acetate, dms. ....lb.	9.44	6.00
nat., dms. ....lb.	10.85	–
Geranyl formate, syn., dms. ....lb.	6.60	–
nat., dms. ....lb.	19.95	–
Gilsonite, g.p., bulk, c.l., f.o.b. Bonanza, Utah ....ton	180.00	–
selects, same basis ....ton	180.00	–
Ginger, Cochin, bgs. ....lb.	.65	–
Chinese sliced ....lb.	.55	.70
Ginger oil, African, dms. ....lb.	75.00	–
Indian ....kilo	66.00	88.00
Ginger oleoresin, NF, bots. ....lb.	30.00	–
Glauber's salt (see Sodium sulfate).		
Gluconic acid tech. 50% dms., c.l., f.o.b. works ....lb.	.50	–
tanks, same basis ....lb.	.44	–

CHEMICAL PRICES

WEEK ENDING AUGUST 29, 1986

Glue, bone, extracted, green, jelly-grams, bgs., c.l. ....lb.	–	–
85 jellygrams, bgs., c.l., f.o.b. ....lb.	.69	–
115 jellygrams, bgs., c.l., f.o.b. ....lb.	.78	–
135 jellygrams, bgs., c.l., f.o.b. ....lb.	.77	–
194 jellygrams, bgs., c.l., f.o.b. ....lb.	.79	–
192 jellygrams, bgs., c.l., f.o.b. ....lb.	.87	–
220 jellygrams, bgs. c.l. f.o.b. ....lb.	.93	–
Glue, hide,		
109 jellygrams, bgs., t.l., f.o.b. ....lb.	.80	–
135 jellygrams, bgs., t.l., f.o.b. ....lb.	.85	–
164 jellygrams, bgs., t.l., f.o.b. ....lb.	.90	–
192 jellygrams, bgs., t.l., f.o.b. ....lb.	.95	–
222 jellygrams, bgs., t.l., f.o.b. ....lb.	1.00	–
251 jellygrams, bgs., t.l., f.o.b. ....lb.	1.05	–
283 jellygrams, bgs., t.l., f.o.b. ....lb.	1.10	–
316 jellygrams, bgs., t.l., f.o.b. ....lb.	1.15	–
347 jellygrams, bgs., t.l., f.o.b. ....lb.	1.20	–
379 jellygrams, bgs., t.l., f.o.b. ....lb.	1.25	–
411 jellygrams, bgs., t.l., f.o.b. ....lb.	1.30	–
444 jellygrams, bgs., t.l., f.o.b. ....lb.	1.35	–
477 jellygrams, bgs., t.l., f.o.b. ....lb.	1.40	–
Glutamic acid, 99½% dms., 100-lb. lots, frt. alld. ....kilo	9.65	–
Glycerine, nat., refd., USP, CP 99½% tanks, divd. ....lb.	.89½	–
USP, CP, nat. 96%, tanks, divd. ....lb.	.87¾	–
Syn. 96%, tanks divd. ....lb.	.89¼	–
Syn. 99.5%, tanks divd. ....lb.	.91	–
Glycine (see Aminoacetic acid).		
Glyceryl guaiacolate. 100-lb. fib. dms. f.o.b. ....kilo	14.50	–
Glycolic acid (see Hydroxyacetic acid)		
Glyoxal 40% soln., bulk, tanks, divd. ....lb.	.44½	–
Grapefruit oil, Fla., dms. ....lb.	2.75	–
Calif., dms. ....lb.	2.25	–
Israeli ....lb.	2.25	–
Graphite, amorph, powd., bgs., dms., ex whse. ....lb.	.16	.40
cryst., 66-90%, powd., bgs., dms., ex whse. ....lb.	.30	.60
Graphite, cryst., 90-92%, powd., bgs., dms., ex whse. ....lb.	.40	.75
95-96% powd., bgs., dms., ex whse. ....lb.	.90	.90
Graphite, amorph., cryst., 97% and up, powd., bgs., dms., ex whse. ....lb.	.80	1.20
Graphite, flake, No. 1, 90-95%, bgs., dms., ex whse. ....lb.	.65	.75
No. 2, 90-85%, bgs., dms., ex whse. ....lb.	.65	.75
Grease (See Oils, Fats & Waxes market report)		
Grease oil (See Lard oil).		
Guaiacol, tech., 500-lb dms., 24,000 lb. min., f.o.b. Wallingford, Conn. ....lb.	2.70	–
NOTE: Purified grades are 10c. higher		
Guaiacwood oil, dms. ....lb.	2.50	–
Guar gum, edible, bgs., c.l., f.o.b. ship't. pt. ....lb.	.50	.75
indust., bgs., high viscosity, c.l., same basis ....lb.	.50	.85

H

Heliotropin, dms. ....lb.	6.00	8.25
Hemlock oil (see Spruce oil).		
Henbane leaves, bls. ....lb.	.55	–
Heptane, indust., tanks, f.o.b. Beaumont, Tex. ....gal.	1.07	–
85%, tanks, f.o.b. Houston, Tex. ....gal.	1.18	–
Heptanoic acid, syn., tanks, f.o.b. ....lb.	.85	–
1-Hexadecanol, syn., tanks, f.o.b. ....lb.	.43½	–
Hexahydrophthalic anhydride, tech. dms., t.l., f.o.b. works ....lb.	1.42	–
Hexamethylenetetramine, gran. bgs., c.l., t.l., works ....lb.	.55	–
gran. dms., c.l., t.l., works ....lb.	.59	–
pdr. bgs., c.l., t.l., works ....lb.	.60	–
powd. dms, c.l., t.l., works ....lb.	.63	–
Hexane, indust., tanks, works ....gal.	1.01	1.15
65%, tanks, f.o.b. Houston, Tex. ....gal.	1.12	–
1-Hexanol, syn., tanks, f.o.b. ....lb.	.50	–
Hexyl alcohol, mixed isomers tanks ....lb.	.32	–
p-Hexyl methacrylate, dms., c.l., works ....lb.	.75½	–
Hexylene glycol, tanks, divd. ....lb.	.50	–
Hexylresorcinol, USP, dms., 25-lb. lots or more, frt. alld. ....lb.	30.00	–
Homatropine hydrobromide, USP, 10-100-oz. lots, bots. ....oz.	10.25	11.30
Homatropine methylbromide, USP, 10-250 oz. lots, bots. ....oz.	8.70	10.70
Horehound herb, bls. ....lb.	.25	.28
Hydrazine hydrate, 85%, t.l., frt. alld. ....lb.	1.54	–
55-gal. dms., t.l., frt. alld. ....lb.	1.51	–
Hydriodic acid, purif., 47%-57%, 2-cbys., f.o.b. works ....lb.	7.50	–
Hydroabietyl alcohol, tech., solid. dms., c.l., f.o.b. zone 1 ....lb.	.85	–
tanks, f.o.b. zone 1 ....lb.	.80	–
Hydrobromic acid, 48% dms., c.l., t.l., f.o.b. ....lb.	.38½	–
Hydrochloric acid, anhyd. (see Hydrogen chloride).		

CHEMICAL PRICES

WEEK ENDING AUGUST 22, 1986

Hydrochloric acid, 20° Be, tanks, works, East ... ton	55.00	65.00
Midwest ... ton	60.00	70.00
Gulf Coast ... ton	57.00	-
West Coast ... ton	90.00	105.00
22° acid, same basis, East ... ton	68.00	78.00
Midwest ... ton	56.00	70.00
Gulf Coast ... ton	63.50	-
West Coast ... ton	100.00	115.00
NOTE: Prices vary and are either freight collect freight equalized depending on producer and location.		
Hydrocortisone acetate, micronized, dms., 25 kilos or more . gram	.70	-
Hydrocortisone, alcohol, micronized, dms., 25 kilos or more . gram	.70	-
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)		
Hydrofluoric acid, aqueous, 70% tanks, f.o.b. frt. equald ... 100lbs.	43.00	-
Hydrofluosilicic acid, 15-gal. dms., t.l., works, 30% basis ... ton	151.00	-
tanks, 100% basis, works ... ton	100.00	140.00
Hydrogen bromide, anhyd. cyls., extra, 30,000-lbs., f.o.b. works . lb.	7.00	-
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works ... lb.	.65	-
600-lb. cyls., c.l., same basis . lb.	.62	-
Hydrogen chloride, anhyd., tube trailers, seller's trailer, min. 100,000 lbs. a year ... lb.	.37	-
tube trailers, buyer's trailer ... lb.	.27	-
Hydrogen chloride anhyd., tanks, works ... ton	270.00	-
Hydrogen cyanide, liq., 99.5%, tanks, works ... lb.	.50	-
Hydrogen fluoride, anhyd., tank cars c.l., f.o.b., frt. equald ... lb.	.8875	-
Hydrogen peroxide, 35% tech., tanks, works, ft. equald ... lb.	.2325	-
50% tankcars, frt. equald ... lb.	.3225	-
70%, tankcars frt. equald ... lb.	.45	-
Hydrogen sulfide, liq., 99.25% min. seller's tanks, works ... lb.	.12	.13
170 lb. cylinders ... lb.	2.27	-
Hydroquinone, photo grade, consumers c.l., t.l., divd ... lb.	2.54	-
tech, dms. c.l., divd ... lb.	1.95	-
Hydroxyacetic acid, tech., 70%, tanks, Belle, W. Va. ... lb.	.49½	-
Hydroxylammonium sulfate, dms., t.l., f.o.b. ... lb.	.83	-
p-Hydroxybenzene sulfonic acid (see p-Phenolsulfonic acid).		
Hydroxybutyl methylcellulose (visc 12,000 cps.) 50 lb. bags, tl., cl. 30,000 lb. min, divd., zone 1 ... lb.	2.10	-
Hydroxycitronellal dimethyl acetal, dms ... lb.	18.55	-
p-Hydroxydiphenylamine, dms., t.l., f.o.b. works ... lb.	4.10	-
Hydroxycitronellal, natural, dms ... lb.	9.40	-
pure, dms ... lb.	13.60	-
extra grade, dms ... lb.	14.60	-
syn., dms ... lb.	9.50	-
Hydroxyethyl cellulose, t.l., divd ... lb.	2.07	2.12
Hydroxyethyl methylcellulose (visc. 5,000 through 45,000 cps.) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 ... lb.	2.73	-
Hydroxypropyl methylcellulose, premium, U.S.P. (visc. 4,000 through 15,000) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 ... lb.	2.87	-
Hydroxypropyl methylcellulose, U.S.P (visc. 50 through 100 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 ... lb.	2.99	-
Hydroxypropyl methylcellulose (visc. 4,000 through 15,000 cps) 50 lb. bags, t.l., c.l., 30,000 lb. in., divd., zone 1 ... lb.	2.17	-
Hydroxypropyl methylcellulose (visc. 50 through 100 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 ... lb.	2.64	-
8-Hydroxyquinoline (see Oxyquinoline)		
Hypophosphorous acid, purif., 50% dms., c.l., works ... lb.	3.15	-

I

Ichthammol, NF, 200-kilo dms ... lb.	4.25	4.50
Iminodiacetic acid, 98% min., dms., c.l., t.l., works ... lb.	3.00	-
Indole, dms ... lb.	25.50	-
Inositol, 50-kilo dms., 1000 kilos or more, f.o.b. works ... kilo	17.50	22.00
Iodine, crude, dms ... kilo	13.50	16.00
Iodine USP ... lb.	14.21	14.59
Iodochlorhydroxyquin, USP, XVI 50-kilo dms., 100-499 kilos, frt. alld ... kilo	36.00	45.00
Iodoform, NF, dms., 300-lbs., f.o.b. works ... lb.	24.00	-
a-Ionone, dms ... lb.	16.20	-
b-Ionone, dms ... lb.	13.10	-
Ipecac root, whole, bgs ... lb.	25.00	-
Irish moss, bleached, prime, whole ... lbs.	.56	.60
Iron blue, alkali-resistant, bgs., l.c.l., ton lots, div. E ... lb.	2.70	-
Iron blue, reg., bgs., l.c.l., ton lots, same basis ... lb.	2.00	2.15
Iron, purif., powd., pails, 10-100-lb. lots ... lb.	1.00	-
Iron oxide, black, syn., bgs., c.l., frt. equald ... lb.	.68½	.75½
Iron oxide, brown, syn., bgs., c.l., frt. equald ... lb.	.68	.78½
Iron oxide, metallic brown, l.c.l., bgs., frt. equald ... lb.	.13	.15
Iron oxide, nat., red., dom., pure bgs., c.l., works ... lb.	.275	.40
Iron oxide, yellow, ... lb.	.16	-
syn., bgs., c.l., frt. equald ... lb.	.63	.71
Iron oxide, buff, nat., dom, bgs., c.l., t.l., works, light ... lb.	.75	.80
dark ... lb.	.60	-
other shades, bgs., c.l., frt. equald ... lb.	.50	.55
Isatoic anhydride, bgs., f.o.b. works lb.	1.40	-
Isoamyl alcohol, 95% tanks, frt. alld ... lb.	1.44	1.48
Isoborneol, 100 lb. dms ... lb.	7.25	-
Isobornyl acetate, dms ... lb.	.80	1.15
Isobutyl acetate, solvent grade, tanks, frt. alld ... lb.	.45	.48
Isobutyl acrylate, tanks, frt. alld. E. lb.	.71	-
Isobutyl alcohol, tanks, divd ... lb.	.29	-
Isobutylene, 99%, tanks, f.o.b. works ... lb.	.32	-
Isobutyl isobutyrate, tanks, f.o.b. works ... lb.	.42½	-
Isobutyl methacrylate, tanks, divd. . lb.	.67	-
Isobutyl phenylacetate, dms ... lb.	3.10	3.50
Isobutyl salicylate, dms ... lb.	3.45	-
Isobutyraldehyde, tech., dms., c.l., divd ... lb.	.43	-
tanks, divd ... lb.	.35	-
Isobutyric acid, dms., c.l., t.l., divd. . lb.	No Prices	
tanks, same basis ... lb.	.75	
Isobutyronitrile, dms., c.l., f.o.b. works frt. collect ... lb.	.84	-
tanks, same basis ... lb.	.75	-
Isoeugenol, dms ... lb.	5.20	5.80
Isoniazid, powd. ... kilo	12.00	-
Isonicotinic acid, hydrazine (see Isoniazid).		
Isononyl alcohol, dms., t.l. ... lb.	.48	-
Iso-octyl alcohol, tanks, divd ... lb.	.44	-
Isophorone, tanks divd ... lb.	.61	-
Isophthalic acid, 99%, bulk, f.o.b., Joliet, Ill., min. frt. ald ... lb.	.48	-
Isophthalonitrile, bgs., t.l., works ... lb.	2.85	-
Isopropyl acetate, tanks, divd ... lb.	.47	-
Isopropyl alcohol, anhyd., 99%, tanks, divd ... gal.	1.38	-
refd., 95%, tanks, divd ... gal.	1.31	-
refd., 81%, tanks, divd ... gal.	1.25	-
Isopropyl ether, tanks, divd ... lb.	.44	-
crude, tanks, divd ... lb.	.87	-
Isopropylamine. (see Mono-, Di- or Tri-).		
Isopropyl myristate, dms., t.l., E. ... lb.	1.19	1.50
Itaconic acid, refd. bgs t.l. ... lb.	1.45	1.48

J

J acid, paste, dms., works, 100% basis ... kilo	4.75	-
Japan wax, cs. ... lb.	5.50	5.80
Jojoba oil, 55-gal. dms., f.o.b. Arizona producing point ... gal.	55.00	60.00
Juniper berry oil, Italian ... kilo	47.00	-

K

Kaolin, water washed, fully calcined, bags c.l., f.o.b. Georgia .. ton	255.00	-
NF pwd., colloidal, bacteria controlled, 50 lb. bags., 5,000 lb. lots ... lb.	.24	-
Kaolin, uncalcined. No. 1 coating, bulk, c.l., f.o.b., Georgia ... ton	94.00	-
No. 2 coating ... ton	75.00	-
No. 3 coating ... ton	73.00	-
No. 4 coating ... ton	70.00	-
filler, gen.l purpose, same basis ... ton	56.00	-
delaminated water washed, uncalcined paint grade 1 micron avg., same basis ... ton	182.00	-
dry-grd. airfloated soft, same basis ... ton	80.00	-
Karaya gum, No. 1, powd., bbls ... lb.	2.25	-
No. 2, powd., bbls ... lb.	1.95	-
Kola nuts, bgs ... lb.	.49½	.51

L

Lacquer diluent petroleum, 140F.-200F. b.r., t.c., New Jersey and New York ... gal.	1.25	-
Houston, Texas ... gal.	1.29	-
Lacquer diluent, petroleum 200F.-240F. b.r., tankcars, New York and New Jersey ... gal.	1.20	1.25
Houston, Tex. ... gal.	1.12	-
Lactic acid, food grade 88%, l.c., f.o.b. works ... lb.	1.06	-
50%, t.c., frt. equald ... lb.	.62	-
tech., 88%, t.c., frt. equald ... lb.	1.03	-
Lactose, edible, reg. bgs., c.l., works ... lb.	.22	.26
Lactose, USP, reg. dms., c.l., t.l., frt. equald ... lb.	.56	.69
Lactose, USP, spray dried, bgs., t.l., frt. equald ... lb.	.60	-
Lake C, red toner. (red 53) bbls., frt. alld ... lb.	5.70	-
Lanolin, anhyd., cosmetic. 400-lb. dms., works ... lb.	1.18	1.25
pharmaceutical, 400-lb. dms. works ... lb.	1.15	-
tech., (under 2% f.f.a.), 400-lb. dms., works ... lb.	1.08	1.13
Lard (See Oils, Fats & Waxes market report.)		
Lard oil, No. 1, dms., c.l., f.o.b. ... lb.	.34	
tanks, same basis ... lb.	.26	
Lard oil, extra, winter-strained, dms., c.l. ... lb.	.41	-
tanks, same basis ... lb.	.33	-
prime, burning, dms., c.l., same basis, Chicago ... lb.	.43	-
prime, burning, tanks, same basis ... lb.	.35	-
NOTE: 300 Mi. rad. 1¼c. higher, except Texas, 2c., and West Coast, 3c. higher.		
Laurel leaves, Turkish ... lb.	1.60	-
Laurent's acid, drums, f.o.b. ... lb.	3.85	-
Lauric acid, coml., pure bgs., c.l. ... lb.	.65	.71
Lauric aldehyde (aldehyde C-12). dms ... lb.	7.75	-
n-Lauryl methacrylate, dms., c.l., t.l., works ... lb.	1.72	-
Lavandin oil, Abrialis, 30-32%, dms. lb.	4.00	-
Lavender flowers, ord. ... lb.	.65	.75
medium, bls ... lb.	.80	.90
select. bls ... lb.	1.10	1.18
Lavender flower oil, NF, French, 40-42%, ester, cns ... lb.	9.25	13.50
spike, Spanish, dms ... kilo	15.00	22.00
Lead acetate, purif., flake. 400-lb. dms., works ... lb.	.46	-
tech., flake, t.l., 400lb. dms., works ... lb.	.37	-
Lead blue, basic, sulfate, bbls., o.l., ship.f. pt., f.o.b. ... lb.	.87	-
Lead carbonate. (see Lead white basic carbonate).		
Lead chloride, 400-lb. dms., works. lb.	3.25	-
Lead dioxide, tech., powd., 200-lb. dms., t.l., works ... lb.	.66	.70
Lead fluoborate, liq. conc., dms., t.l., works, frt. equald ... lb.	.65	-
Lead metal, divd ... lb.	.16	.18½
Lead monosilicate, milled, bgs., c.l., f.o.b. works ... lb.	.58½	-
coarse, bgs., c.l., same basis ... lb.	.57½	-
Lead naphthenate liq., 24% Pb. dms., frt. alld ... lb.	.93	-
Lead nitrate tech., cryst., 400-lb. dms., t.l., works ... lb.	.32½	-
Lead peroxide (see Lead dioxide).		
Lead red, 95% Pb_3O_4, or less, bgs. c.l., works ... lb.	.37	-
Lead red, 97% Pb_3O_4, bgs. c.l., works ... lb.	.37½	-
Lead, red, 98% Pb_3O_4, bgs., c.l., same basis ... lb.	.37½	.40½
Lead silicate (see Lead, white, basic silicate).		
Lead silicochromate, bgs., c.l., works ... lb.	.35	-
Lead sulfate (see Lead, blue, basic sulfate and Lead, white, basic sulfate)		
Lead, white, basic carbonate, bgs., c.l., frt. alld ... lb.	.82	-
Lead, white, basic, silicate, bgs., c.l., same basis ... lb.	.87	-
Lead, white, basic sulfate, bgs., c.l., same basis ... lb.	.65	-
Lecithin, edible, tech., bleached, non-ret. dms., l.c.l., works ... lb.	.36	-
unbleached non-ret. dms., l.c.l., same basis ... lb.	.34	-
edible, tech, bleached, non-ret., dms., t.l., works ... lb.	.28	-
unbleached, non-ret., dms., t.l., same basis ... lb.	.26	-
Lemon oil, Argentine ... kilo	14.00	-
Brazil ... lb.	8.50	7.00
Calif., USP, dms ... lb.	9.00	9.35
Italian ... lb.	12.50	-
Lemongrass oil, Indian, dms ... kilo	11.25	-
Guatemalan, dms ... lb.	2.25	-
dl-Leucine, dms., 1 kilo works ... kilo	60.00	90.00
Licorice root, whole, bls ... lb.	.40	.50
gran., bls ... lb.	.70	.90
powd., bls ... lb.	.95	-
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate).		
Lime, chemical, pebble (quicklime), bulk, 50,000 lbs., works, f.o.b. plants ... ton	39.00	45.00
Lime, chemical, hydrated, bulk, same basis ... ton	46.00	50.00
bgs., same basis ... ton	54.00	57.00
Lime, NF, purif., 100-lb. dms ... lb.	.69	-
Lime oil, dist., Mexican, dms ... lb.	8.00	-
Haitian, dist., dms ... lb.	6.00	-
expressed, dms ... lb.	17.50	-
Lime salts (see Calcium).		
d-Limonene, dms ... kilo	.70	.85
Linalool ex bois de rose oil, dms ... lb.	6.35	-
syn., 98-100% dms., f.o.b. works ... lb.	2.93	-
Linalool oxide, syn., 55-gal. dm ... lb.	7.75	-
Linalyl acetate ex bois de rose oil, 90-92%, dms ... lb.	18.00	21.00
syn. 98-100%, dms., f.o.b. works. lb.	3.10	-
Linalyl benzoate, syn., 55-gal. dms. lb.	8.00	-
Linalyl cinnamate, syn., 55-gal. dms ... lb.	59.85	-
Linalyl formate, syn., 55-gal. dms ... lb.	7.75	8.50
Linalyl isobutyrate, syn., 55-gal. dms ... lb.	8.50	8.55
Lindane, 20% formulation, dms., divd ... gal	13.10	-
99.9% tech., dms., t.l., divd ... lb.	8.50	-
Linalyl propionate, syn., 55-gal. dms ... lb.	7.60	-
Linden flowers, with leaves, bls ... lb.	.76	.85
without leaves, bls ... lb.	.90	1.18
Linseed meal (see Oils, Fats & Waxes market report).		
Linseed oil, (see Oils, Fats & Waxes market report)		
Linseed oil fatty acid, dist., dms ... lb.	.60	.67
tanks ... lb.	.53	.62
Litharge, com.l., powd., bgs., c.l., works ... lb.	.36½	.60
Lithium bromide, anhyd., dms., ton lots, divd ... lb.	6.27	-
soln., same basis ... lb.	4.00	-
Lithium carbonate, powd., bgs., c.l., t.l., divd ... lb.	1.50	-
Lithium chloride, anhyd., c.l., t.l., divd ... lb.	6.32	-
soln., dms., c.l., t.l., divd ... lb.	2.84	-
Lithium fluoride, dms., c.l., t.l., divd. lb.	4.90	-
Lithium hydride, c.l., t.l., divd. 10,000 or more ... lb.	23.50	-
Lithium hydroxide, monohydrate, dms., c.l., t.l., divd ... lb.	1.93	-
Lithium hypochlorite, c.l., t.l., works lb.	1.07	-
Lithium metal, 1,000-lb. lots or more, divd ... lb.	22.70	-
Lithium nitrate, tech., dms., 100-lb. lots ... lb.	3.25	-
Lithium stearate, bgs., c.l., frt. alld. lb.	1.01	-
Lithium sulfate, anhydrous, t.l. divd. lb.	3.09	-
Lithol red toner, barium, dms., frt. alld ... lb.	3.27	-
calcium, dms., same basis ... lb.	3.50	-
Lithol rubine toner (red 57), resinated, dms., frt. alld ... lb.	5.80	-
Locust bean gum, powd., bgs ... lb.	6.00	6.75
2,4-Lutidine, dms., t.l., frt. equald. kilo	5.75	-
Lycopodium, 50-lb. dms ... lb.	8.00	[illegible]
1-Lysine monohydrochloride, feed grade, 10,000 lbs. divd ... lb.	1.35	[illegible]

M

Mace, East Indian, siftings ... lb.	4.95	[illegible]
Siauw #2 ... lb.	5.60	[illegible]
Magnesia, tech., light, neoprene-grade, bgs., c.l., t.l., works lb.	.75	[illegible]
Magnesia, syn., tech., chemical-grade, bulk, c.l., t.l. works ... ton	330.00	-
bags, c.l., t.l., same basis ... ton	365.00	-
deadburned, bulk, same basis ... ton	392.00	-
bgs., same basis ... ton	409.00	-
Magnesia, nat., tech., heavy, 85%, 150 mesh, bulk, c.l., t.l., f.o.b. Nev. ... ton	232.00	-
90%, 325 mesh, same basis .. ton	265.00	-
Magnesium bromide, 80-lb. dms., hexahydrate ... lb.	2.50	-
Magnesium carbonate, light, tech., bgs., c.l., t.l., works, frt. equald ... lb.	.73	[illegible]
USP, tile bgs., c.l., same basis ... lb.	.74	[illegible]
USP, heavy, bgs., c.l., same basis. . lb.	.83	-
Magnesium chloride, anhyd., 92%, flake or pebble dms., c.l., works ... lb.	.12¾	[illegible]
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works ... lb.	.14½	-
Magnesium gluconate, 100-lb. dms. f.o.b. works, E. ... lb.	4.25	-
Magnesium hydroxide, NF, powd., dms., c.l., t.l. works frt. equald ... lb.	.78	-
Magnesium lauryl sulfate, tanks, f.o.b. works ... lb.	.22	[illegible]
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more. f.o.b. Freeport, Tex. ... lb.	1.53	-
die casting alloys ... lb.	1.29	[illegible]
Magnesium nitrate, tech., flake. 250-lb. dms., t.l., works ... lb.	.32	-
Magnesium oxide, USP, light, bgs., c.l., works, frt. equald ... lb.	1.65	-
heavy, dms., c.l., same basis ... lb.	1.54	-
Magnesium oxide, tech. (see Magnesia).		
Magnesium phosphate, tribasic, tech. 60-lb. bgs., f.o.b. ... lb.	1.00	-
Magnesium silicate (see Talc).		
Magnesium silicofluoride, bgs., c.l., t.l. works ... lb.	.1645	[illegible]
Magnesium stearate, bulk, t.l. ... lb.	.85	[illegible]
Magnesium sulfate 10% Mg. (epsom salts), tech. bgs., t.l., works ... lb.	.14	-
bulk, same basis ... lb.	.13	-
USP, cryst., bgs., same basis . lb.	.13½	-
USP, cryst., bulk, same basis . lb.	.14½	-
Magnesium sulfate, 17% Mg. (synthetic monohydrate), tech. bgs. t.l., works ... lbs.	.80	-
CP, same basis ... lbs.	1.25	-
Magnesium sulfate, anhydrous, CP bgs., t.l., works ... lbs.	1.75	-
Magnesium sulfate trihydrate, tech., bgs., t.l., works ... lb.	.46	-
Magnesium trisilicate, USP, powd., fib. dms. 8,000-lb. lots ... lb.	.38	-
USP, micronized powd., dms., 375-lb. lots ... lb.	.83	-
Malathion, tech., dms., t.l., works. . lb.	1.82	-
Maleic acid, cryst., powd., drums, 100 kilos, f.o.b. ... kilos	3.20	-
drums, tons, f.o.b. ... kilos	2.80	-
Maleic anhydride, bgs., t.l., works, frt. equald ... lb.	.55	[illegible]
tanks, works, frt. equald ... lb.	.53	-
Malic acid, purif, and food grades. 50-lb. bgs., t.l., c.l., divd ... lb.	.81	.84
Mandarin oil (see Tangerine oil, Italian).		
Mandelic acid, dms., 1,000 kilo lots ... kilo	8.00	[illegible]
Manganese acetate, dihydrate, dms., divd ... lb.	.43½	.48
tetrahydrate, dms., t.l., divd ... lb.	.46	-
Manganese borate printing ink drier. lb.	1.66	1.80
Manganese borate, tech., dms ... lb.	.80	[illegible]
Manganese carbonate, chemical grade, 46% Mn. bgs., 20,000-lb. lots or more, works ... lb.	1.05	[illegible]
Manganese chloride, anhyd., dms., 20,000-lb. lots or more ... lb.	.81	[illegible]
Manganese dioxide, nat., African, grd., 74%-76% MnO_2, 100-lb. bgs., t.l., works ... ton	200.00	[illegible]
84% MnO_2, same basis ... ton	250.00	[illegible]
Manganese dioxide, syn., cryst., battery grade, 90%-92% MnO_2, 100-lb. bgs., c.l., works ... lb.	.70	[illegible]
chemical, ferrite grade, same basis ... lb.	.49	[illegible]
Manganese gluconate, FCC grade, 100-lb dms., f.o.b. works ... lb.	3.50	[illegible]
Manganese hydrate dms., divd ... lb.	.55	[illegible]
Manganese hypophosphite, NF, dms. ... lb.	6.75	[illegible]
Manganese metal, electrolytic No. 1 chip, bulk, c.l., works ... lb.	.83¾	[illegible]
dms., c.l., works ... lb.	.8485	[illegible]
Manganese naphthenate, liq., 6% Mn. dms., divd ... lb.	.87	[illegible]

Manganese resinate, fused, 3½% Mn. dms., frt. alld ... lb.	.34¼	-
precip. 6½-7% Mn. dms ... lb.	.42	-
Manganese sulfate, fertilizer grade, run-of-pile, 75%-78% $MnSO_4$, 25 kilo bgs., 50-ton cars, divd. E. of Miss. ... ton	280.00	-
bulk, hopper cars, same basis .. ton	245.00	-
Manganese sulfate, 28% Mn. gran., bgs., c.l., t.l., works ... ton	330.00	-
Manganese tallate, liq., 6% Mn, dms., frt. alld ... lb.	.60	-
Mannitol, coml., powd., dms., t.l., works ... lb.	3.02	-
Marjoram, French ... lb.	.86	.87
Egyptian ... lb.	.60	.78
MBT (see 2-Mercaptobenzothiazole).		
MBTS (see Mercaptobenzothiazyl disulfide).		
MDI (see Diphenylmethane 4,4,-di-isocyanate)		
Melamine, bgs., c.l., t.l., 40,000-lb. min., f.o.b. works ... lb.	.51½	.59½
bulk, c.l., t.l., same basis ... lb.	.50	.58
Melamine-formaldehyde resin, g.p., t.l. frt. alld ... lb.	.55	.60
molding compounds, same basis ... lb.	.48½	-
Menhaden oil, crude, tanks, works Atlantic Coast ... lb.	.11	-
Gulf ports, same basis ... lb.	.12	-
Menthol, nat., USP, Brazilian large and regular crystals, spot, cs., bulk ... lb.	8.75	7.50
syn., USP, racemic, 100-450 lbs. lb.	9.00	-
2-Mercaptobenzothiazole, bgs., t.l., works, frt. alld ... lb.	1.25	1.55
Mercaptobenzothiazyl disulfide t.l., dms., works, frt. alld ... lb.	1.33	1.66
Mercuric chloride NF, gran., powd., 100-lb. dms., f.o.b. works .. lb.	8.50	-
Mercuric oxide, red, purif., 100-lb. dms., f.o.b. works ... lb.	7.00	7.25
tech., 100-lb. dms., same basis ... lb.	5.50	7.00
yellow, NF, 100-lb. dms., same basis ... lb.	7.00	7.25
tech., 100-lb. dms., same basis ... lb.	5.50	7.50
Mercurous chloride (see Calomel).		
Mercury, ammoniated (see White precipitate USP XV).		
Mesityl oxide, tanks, divd ... lb.	.46	-
Methacrylic acid, glacial, 99%, dms., t.l., frt. equald ... lb.	.87	-
tanks, works, frt. equald ... lb.	.76	-
d-Methamphetamine hydrochloride, dms ... lb.	12.00	18.00
dl-Methamphetamine hydrochloride, dms ... lb.	4.50	7.00
Methanol, syn., tanks, 4,000 gals., f.o.b. producing point, Gulf Coast ... gal.	.52	.71½
Methenamine (see Hexamethylenetetramine).		
Methionine hydroxy analogue, dry, 85% activity t.l., frt. alld ... lb.	.88	-
liquid, 88% activity, t.l. frt alld ... lb.	.88	-
dl-Methionine (see Racemethionine)		
Methoxychlor, 50% wettable powder, dealers, dms ... lb.	2.05	-
Methyl abietate, non-ret. dms., c.l., divd. E. ... lb.	9.40	-
Methyl abietate, hydrogenated, non-ret. dms., t.c.l., same basis ... lb.	10.00	-
Methyl acetoacetate, East, divd. bulk ... lb.	.85	-
Methyl acrylate, tanks, divd ... lb.	68.50	-
Methyl alcohol (see Methanol)		
Methyl amyl alcohol, tanks, divd ... lb.	.55	-
Methyl n-amyl ketone, tks., divd ... lb.	.54½	-
Methyl anthranilate, tech., dms., f.o.b. ... lb.	1.41	2.65
Methyl benzoate, dms., t.l. ... lb.	.25	-
99.9%, perf. grade, dms., t.l. ... lb.	1.65	-
Methyl bromide, dist., tanks, 140,000 lbs. min., frt. alld ... lb.	.58¾	-
Methylcellulose, premium, USP (visc. 400 through 4,000 cps) 50 lb. bags, tl., cl., 30,000 lb., min., dvd., zone 1 ... lb.	2.73	-
Methylcellulose, premium USP (visc. 15 cps) 50 lb. bags, tl., cl., 30,000 lbs., divd., zone 1 .. lb.	2.65	-
Methylcellulose, (visc. 400 through 4,000 cps) 50 lb. bgs., tl., cl., 30,000 lbs., divd., zone 1 .. lb.	2.24	-
Methylcellulose (visc. 15 to 25 cps) 50 lb. bags, tl., cl., 30,000 lb. min., divd., zone 1 ... lb.	2.52	-
Methyl chloride, indust. bulk, tanks, f.o.b. works ... lb.	.26	-
Methyl chloroform (see 1,1,1-Trichloroethane).		
Methyl cinnamate, dms ... lb.	4.85	-
Methyl p-cresol, dms ... lb.	6.00	-
Methyl ethyl ketone, tanks, divd, E.. lb.	.235	-
Methyl eugenol, 25-lb. cns ... lb.	3.55	3.80
Methyl formate, pure, non-ret. dms., works ... lb.	.41	-
tanks, same basis ... lb.	.29	-
tech., tanks, works ... lb.	.31	-
Methyl heptenol, syn., 55-gal. dms. lb.	14.50	-
Methyl heptenone, pure, dms ... lb.	7.30	-
Methyl heptin carbonate, dms ... lb.	45.00	-
Methyl p-hydroxybenzoate (see Methylparaben)		
Methyl ionone, std., dms ... lb.	7.30	9.40
Methyl isoamyl ketone, tanks, divd. E ... lb.	.51	-
Methyl isobutyl carbinol (see Methyl amyl alcohol).		
Methyl isobutyl ketone, tanks, divd. lb.	.35	-
divd. zone 2 (Calif.) ... lb.	.38	-
divd. zone 3 (W. of Rockies, excluding Calif.) ... lb.	.41	-
Methyl isoeugenol, 25-lb. cns ... lb.	6.60	10.40
Methyl methacrylate, tanks, divd ... lb.	.82	-
Methyl naphthyl ketone, cryst., dms ... lb.	14.00	-
Methylparaben, USP, 500 kilograms, f.o.b. ... kilo	10.14	-
tech., 500 kilograms, f.o.b. ... kilo	8.70	-
Methyl parathion, tech., 80%, dms., frt. ald. E ... lb.	1.65	-
Methyl phenylacetate, dms ... lb.	3.60	5.40
N-Methyl 2-pyrrolidone, tanks, f.o.b. plant ... lb.	1.32	-
dms., c.l., t.l., same basis ... lb.	1.40	-
Methyl rosaniline chloride, USP, 1-lb. cans ... lb.	5.50	-
Methyl salicylate, NF, 1000-lb. dms., t.l., frt. alld ... lb.	1.76	1.94
Methyl violet (see Methyl rosaniline chloride).		
Methyl violet toner, molybdated, PMA, bbls., divd. E. of Rockies ... lb.	3.26	-
Methyl violet toner, tungstated, PTA, bbls., same basis ... lb.	4.70	5.20
4,4,-Methylene dianiline (p,p-di-aminodiphenyl methane) crude, dms., t.l., f.o.b. ... lb.	1.75	-
purif., flake, same basis ... lb.	2.25	-
Methylene di-p-phenylene di-isocyanate (see diphenylmethane 4,4,-di-isocyanate).		
Methylene chloride, tanks, 4,000 gal.-min., consumers, divd ... lb.	.35	-
Methylpentanediol (see Hexylene glycol).		
Methylphenylpyrazolone (see 1-Phenyl-3-methyl-pyrazolone-5).		
a-Methylstyrene, f.o.b. shipping pt.. lb.	.44	-
p-Methylnaphthalene, bulk, works. gal.	1.38	-
Methylthionine chloride (see Methylene blue).		
Mica, dry-grd., joint cement, plastic, 50 lb., bgs., c.l., works ... lb.	.07½	-
dry-grd., roofing, 20 to 80 mesh. works ... lb.	.07	-
paint or lacq., wet-grd., 325-mesh, bgs., c.l., f.o.b. works ... lb.	.18¾	-
rubber, bgs., c.l., f.o.b. works ... lb.	.18¾	-
wallpaper, bgs., c.l., f.o.b. works. lb.	.22	-
Microcrystalline wax, petroleum, coating grades, FDA, tanks, works ... lb.	.36½	.46½
laminating grades, FDA, tanks, works ... lb.	.38½	.48
Mineral oil, white, 50-65 vis., USP light tanks, refy ... gal.	2.38	-
65-75 vis., tanks, refy ... gal.	2.42	-
80-90 vis., tanks, refy ... gal.	2.45	-
145-155 vis., tanks, refy ... gal.	2.53	-
USP 160-190 vis., tanks, refy ... gal.	2.54	-
200-210 vis., tanks, refy ... gal.	2.58	-
340-350 vis., tanks, refy ... gal.	2.65	-
Mineral spirits, petroleum, odorless, tanks, New Jersey ... gal.	1.83	1.88
Houston, Tex. ... gal.	1.76	1.79
Mineral spirits, petroleum, regular, tanks, New Jersey ... gal.	1.41	1.49
Houston, Tex. ... gal.	1.41	1.43
Molybdate orange, bbls ... lb.	1.52	1.95
Molybdenum metal, com.l., powd., 99.8%, dms., works ... lb.	13.50	-
Molybdenum trioxide, CP, dms., works, 24,000 lbs. or more. lb.	5.25	-
tech., chemical, dms., 24,000 lbs. or more, basis ... lb.	2.85	2.85
tech. metallurgical, dms. same basis. lb.	2.65	2.65
Molybdic acid (See Ammonium dimolybdate)		
Monoammonium phosphate, tert. grade, min. 13% N. 52% P. bulk, c.l., f.o.b. Fla. works ... ton	155.00	-
Monoammonium phosphate, tech., bgs., c.l., t.l., works, frt. equald. ... 100 lbs.	54.00	-
food grade, bgs, c.l., t.l., same basis ... 100 lbs.	59.25	-
Mono-tert-butyl-m-cresol, bulk, t.l. . lb.	1.69	-
Monobutylamine, bulk, divd ... lb	.96	1.00
Monochloroacetic acid, purif. (see Chloroacetic acid, mono)		
Monochlorobenzene, tanks, f.o.b. . lb.	.42½	-
Monoethanolamine, tanks, frt. alld. E ... lb.	.43	.46
Monoethylamine, 70% aqueous tanks, frt. prepaid, 100% basis .. lb.	.94	-
anhyd., tanks, same basis ... lb.	.92	-
Monoisopropanolamine, dms., c.l., frt. alld. E. ... lb.	.78	-
tanks, same basis ... lb.	.68	-
Monoisopropylamine, anhyd., dms., c.l., frt. prepaid ... lb.	.78	-
tanks, same basis ... lb.	.78	-
Monomethylamine, anhyd., tanks, contained basis frt. equald ... lb.	.54½	-
25% soln., tanks, frt. alld. 100% basis ... lb.	.57	-
40-80% soln., tanks, frt. equald. 100% basis ... lb.	.63½	-
Monopotassium glutamate, dms., 990 lb. or more, frt. alld ... lb.	2.60	-
Monosodium glutamate, 50-lb. bgs. c.l., t.l., divd ... lb.	.75	.80
100-lb. drums, c.l., t.l., divd ... lb.	.85	-
Monosodium phosphate (see Sodium phosphate, monobasic).		
Montan wax, crude, imp., German . lb.	.55	.57
dom., Calif., bgs., c.l., t.l., f.o.b. shipt. pt ... lb.	.81	-
refd., dom. Calif., same basis ... lb.		
Morphine alkaloid, NF, 25 k lots .. kilo	1018.00	-
Morphine sulfate, USP, 25 k lots .. kilo	850.00	-
Morpholine, dms., c.l., frt. alld. E. . lb.	1.02	-
tanks, frt. alld., E ... lb.	.94	-
Muriatic acid (see Hydrochloric acid).		
Musk, syn., ambrette, 25-lb. cns .. lb.	6.00	7.00
Musk, syn., ketone, dms ... lb.	10.75	-
Musk, syn., xylol, dms ... lb.	3.60	-
Mustard oil, syn. (see Allyl isothiocyanate).		
Mustard seed, Brown No. 1 ... lb.	.24	-
Canadian No. 1 Yellow ... lb.	.25	-
Oriental No. 1 bgs ... lb.	.25	-
Myrcia oil (see Bay oil).		
Myristic acid, coml., pure, t.l., bgs. . lb.	1.30	-
tanks ... lb.	1.12	-
Myristica oil (see Nutmeg oil).		
Myrrh gum, bgs ... lb.	2.25	-

N

Naphtha, high solvency (see Solvent naphtha, petroleum).		
Naphtha, petroleum, cleaners (see Cleaner's naphtha).		
Naphtha, VM&P, petroleum, tanks, New Jersey and New York ... gal.	1.29	1.34
Houston, Tex. ... gal.	1.20	-
Naphthalene, crude, dom., 78°, tanks, works ... lb.	.22	-
Naphthalene, phthalic anhydride grade, tanks, works ... lb.	.23½	-
Naphthalene, petroleum, 80°C., f.o.b. ... lb.	.30	.32½
Naphthalene, refd., balls, flakes, whole salers, jobbers, dms., works ... lb.	.65	.77
Naphthenic acid, crude, bulk, works lb.	.16	.32
refined, 220 acid, same basis ... lb.	.75	1.00
a-Naphthol, ground, dms., t.l. divd. lb.	1.81	-
b-Naphthol, tech. flake, 80-lb. bgs., c.l., works ... lb.	1.10	-
Naphthol arylide red toner deep shades, bbls ... lb.	9.50	-
light shades, bbls ... lb.	7.75	-
2-Naphthol-3,6-disulfonic acid, disodium salt (see R salt).		
1-Naphthol-5-sulfonic acid (see L-acid).		
1-Naphthol-5-sulfonic 8-amino acid (see S acid).		
Naphthylamine sulfonic mixed acid (see Cleve's acid).		
a-Naphthylamine, tanks, f.o.b. works ... lb.	2.10	-
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).		
2-Naphthylamine-4,8 disulfonic acid (see Cassella acid).		
2-Naphthylamine-1-sulfonic acid (see Tobias acid).		
Neatsfoot oil, 20°F, t.l., f.o.b. works dms ... lb.	.52	-
tanks, f.o.b. works ... lb.	.47	-
30°F, t.l., f.o.b. works ... lb.	.52	-
tanks, f.o.b. works ... lb.	.44	-
40°F, dms., t.l., f.o.b. works ... lb.	.48	.49
tanks, f.o.b. works ... lb.	.39	-
Delivered prices apply on shipments within 300-mile radius of Philadelphia, Pa.; other areas, 1¼c. higher; Texas, 2c. higher and West Coast 3c. higher.		
Neomycin sulfate, USP, non-sterile, dms., 50-kilo. lots, activity basis, divd ... kilo.	75.00	-
Neopentyl glycol, slurry, 90%., c.l., t.l., divd ... lb.	.522	-
powder, flake, bgs. t.l., divd. . lb.	.595	
Nerol, tech., dms ... lb.	5.30	5.75
perf. grade, dms ... lb.	4.80	5.00
Neroli oil, NF French Bigarade, bots ... kilo	1580.00	1650.00
Tunisian, bots ... kilo	1150.00	-
Nerolidol syn. 55-gal. dms ... lb.	7.05	-
Nerolin, Bromelin ... kilo	7.22	-
Niacinamide, USP, t.l. dms ... kilo.	8.00	-
Niacin NF, dms., 5,000 kilos or more, divd. ... kilo	7.50	-
feed-grade, 98-99.5%, bgs., same basis ... kilo.	5.10	5.50
Nickel acetate, dms., 5,000-lbs. to t.l., divd. E ... lb.	1.82	-
Nickel carbonate, dms., bgs., 5,000-lbs. to t.l., divd. E ... lb.	3.45	-
Nickel chloride, bgs., 10,000-lbs. to t.l., divd. E ... lb.	1.19	-
Nickel fluoborate, liq. conc., dms., t.l., divd. E ... lb.	1.25	-
Nickel metal, electro cathodes, cs., works ... lb.	3.45	-
Nickel nitrate, dms., bgs., t.l., divd E ... lb.	1.18	-
Nickel oxide, 75%-78% Ni, dms., 500-lb. lots, f.o.b works ... lb.	2.80	-
Nickel sulfate, bgs., t.l., divd. E ... lb.	.80	.90
Nicotinic acid (see Niacin).		
Nicotinamide (see Niacinamide).		
Nitric acid, 36° Be., 38°Be, 40°Be, 42°Be. tanks, c.l., works NF, 100% basis ... ton	195.00	-
94½% to 98% HNO_3, tanks, works, 100% basis ... ton	280.00	-
o-Nitroaniline, flake, dms, t.l. works ... lb.	1.51	-
molten, refd., tanks, works ... lb.	1.44	-
molten, tech., works ... lb.	1.37	-
o-Nitroaniline, orange toner, bgs., frt. alld ... lb.	1.90	-
p-Nitroaniline, dms., c.l., t.l., 30,000 lb. min., works ... lb.	1.63	-
o-Nitroanisole, 100-kilo lots ... kilo	8.75	-
Nitrobenzene, tanks, f.o.b ... lb.	.38	.34
o-Nitrochlorobenzene, dms., t.l., c.l., f.o.b. ... lb.	.82	-
tanks, same basis ... lb.	.74	-
2-Nitro-p-cresol, tech., dms., t.l., frt. alld ... lb.	1.75	-
Nitroethane, tanks, divd. E ... lb.	2.50	-
Nitrogen solutions, direct application, over 32% N, and mgf. type. works ... unit-ton.	1.20	-
direct application, 19-32% N ... unit-ton.	1.26	1.45
Nitrogenous sewage sludge, processed, bulk, f.o.b. Chicago ... unit ton.	4.10	-
NOTE: Price is per unit NH_3 plus $1, per unit a.p.a. bulk, f.o.b. producer's works, Chicago.		
Nitrogenous tankage, processed, bulk, per unit-ton NH_3, f.o.b. Carrollville, Wisc. ... unit ton	7.00	-
f.o.b. Forbes, Me. ... unit ton	6.75	-
expanded, bulk, c.l., per unit-ton N, f.o.b. Forrestdale, R.I. unit ton	6.35	-
Nitromethane, dms., t.l., divd. E ... lb.	2.37	-
o-Nitrophenol, dms., f.o.b. works .. lb.	1.00	-
p-Nitrophenol, dms., c.l., f.o.b. works ... lb.	1.05	1.45
2-Nitropropane, tanks, frt. ald. E .. lb.	.55	-
m-Nitrotoluene, tech., dms., frt. ald. lb.	1.15	-
o-Nitrotoluene, dms., c.l., f.o.b ... lb.	.65	-
tanks, same basis ... lb.	.48	.57
p-Nitrotoluene, tech. dms., c.l., works ... lb.	.83	.85
tanks, works ... lb.	.70	-
Nonylphenol, tanks, f.o.b. E. of Rockies, min. frt. ald ... lb.	.49	.53½
Norephedrine hydrochloride (see Phenylpropanolamine hydrochloride)		
Nutmeg oil, dist., East Indian, NF, dms ... kilo	27.00	28.50
Nutmegs, East Indian, whole ... lb.	2.95	3.00

O

Ochre (see Iron oxide, yellow, nat.)		
Ocotea cymbarum oil dms ... lb.	2.25	2.30
1-Octadecanol, syn., tanks, f.o.b ... lb.	.43½	-
1-Octanol, syn., tanks, f.o.b ... lb.	.70	-
n-Octane, 97% min., tanks, f.o.b. Houston, Tex ... gal.	6.25	-
Octyl alcohol, perfumer's grade, bots., cns ... lb.	1.40	1.78
n-Octyl, n-decyl phthalate, tanks, divd ... lb.	.33½	.37
tert-Octylamine, dms., c.l., t.l., works.	2.60	-
Octylphenol, molten, f.o., works ... lb.	.75	.75½
Oiticica oil, liq. dms ... lb.	.40	-
tanks ...	.32	-
Oleic acid, dbl-dist. (white), dms .. lb.	.46	.58
tanks ... lb.	.66	.44
Oleic acid, s.d. (red) dms ... lb.	.43	.49
tanks ... lb.	.35	.41

CHEMICAL PRICES

WEEK ENDING AUGUST 29, 1986

Oleum (see Sulfuric acid, fuming).		
Olibanum gum, tears, bgs ... lb.	2.10	-
Olive oil, edible, Spanish, dms ... gal.	8.00	-
Italian B-type ... gal.	5.35	-
Olivine, crude, works ... ton	12.00	-
20 mesh. works ... ton	15.00	-
100 mesh. works ... ton	20.00	-
Opium, USP, gran. powd. 25-kilo lots ... kilo	125.00	-
Orange oil, expressed, USP, Calif., dms., f.o.b. plant ... lb.	1.20	-
expressed Valencia, dms ... lb.	1.00	1.20
Calif., dist., cns. f.o.b. plant ... lb.	.40	-
Florida, dms ... lb.	.50	.55
Brazilian ... kilo	1.20	-
West Indian, bitter, NF X, cns., dms ... lb.	8.50	-
Orange peel, bitter, Haitian bls ... lb.	.38	-
Oregano, Greece, 30M ... lb.	2.05	-
Turkey ... lb.	2.05	-
Mexico ... lb.	1.05	-
Origanum oil, Spanish, cns ... kilo	35.00	-
Orris root, Florentine, bls ... lb.	4.00	-
powd., bbls., bxs ... lb.	4.60	8.00
Verona bls ... lb.	3.00	-
powd., bbls., bxs ... lb.	4.60	5.00
Ouricury wax, refd., pure, bgs ... lb.	3.25	3.35
Oxalic acid, bgs., c.l., works ... lb.	.44	-
b-Oxynaphthoic acid dms. works, tech ... lb.	2.55	-
Oxyquinoline base, pure, 1,000 lbs., frt. ald ... lb.	8.00	-
Oxyquinoline sulfate, 100 lbs. frt. alld ... lb.	4.00	-

P

Palladium metal, works ... Troy-oz.	145.00	-
Palm oil, (see Oils, Fats & Waxes Market Report)		
Palm oil acid, dbl-dist. dms ... lb.	.31½	-
tanks ... lb.	.30	-
s.d., dms ... lb.	.42	.45
tanks ... lb.	.35	-
Palm kernel oil, bulk, c.i.f., U.S. ports ... lb.	.10	.10½
Palmarosa oil, Indian dms ... kilo	36.00	-
Palmitic acid, 90%, tech., bags ... lb.	.53	-
tanks ... lb.	.51	-
Papaverine hydrochloride, NF powd., imp. bulk ... kilo	58.00	-
Paprika, Hungarian, 100 AU bgs .. lb.	.80	-
Spanish, 110 AU bgs ... lb.	.90	-
Paraffin, fully-refd., 127-130 F., ASTM, tanks, refy ...	.29	.35
130-135 F., ASTM, tanks, refy.	.33½	.39
140-145 F., ASTM, tanks, refy.	.35	.41½
150-155 F., ASTM, tanks, refy.	.41½	.46
slack wax, 5% oil, tanks refy ...	.18	-
12% oil, tanks refy ...	.21	-
20% oil, tanks refy ...	.16	-
AMP temperatures are an arbitrary 3F higher than ASTP.		
Paraformaldehyde, 91%, flake, bgs. c.l., t.l., divd ... lb.	.26½	-
95%, powd., bgs., c.l., t.l. divd. lb.	.39½	-
Paraldehyde, tech., 98%, 55-gal. dms., t.l., divd. E ... lb.	.75½	-
tanks, divd. E ... lb.	.58½	-
Parathion, ethyl, dms., frt. ald ... lb.	1.75	-
Parathion methyl (see Methyl parathion).		
Para toner red, bbls ... lb.	3.75	-
chlorinated, (red 4) kgs ... lb.	3.75	-
Patchouli oil, Indonesian., dms ... kilo	20.00	22.00
Peach kernel oil, USP (see Apricot kernel oil).		
Peanut meal (see Oils, Fats & Waxes market report).		
Peanut oil (see Oils, Fats & Waxes market report).		
Pectin dom., NF, citrus, powd., 100-kilo lots divd ... lb.	3.30	8.70
Pelargonic acid, nat., tanks, min. frt. ald ... lb.	.70	-
syn., tanks, f.o.b. frt. ald ... lb.	.70	-
Penicillin, potassium, non-sterile, 200-billion-unit lots, ... billion units	20.00	25.00
Penicillin, procaine, sterile 50-billion-unit lots; bulk, ... billion units.	36.00	-
Pennyroyal oil, dms ... lb.	5.90	-
Pentachlorophenol, 50-lb. bgs., t.l., f.o.b. Wichita, Kan ... lb.	.56	-
Pentaerythritol, tech., bgs., c.l., f.o.b., frt. ald ... lb.	.71	.72
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).		
Pentaerythritol triacrylate, t.l. dms., f.o.b. works ... lb.	1.50	-
Pentobarbital, dms., 100 lbs. or more, frt. ald ... lb.	7.00	-
Pentobarbital-sodium, dms., 100 lbs. or more, divd ... lb.	14.00	-
Pentylene tetrazol, NF, dms., 200-kilo lots ... kilo	32.00	-
Pepper, black, Brazilian, bgs ... lb.	1.90	1.67
Lampong bgs ... lb.	1.97	1.93
Malabar, bgs ... lb.	1.89	1.97
Tellicherry, bgs ... lb.	2.30	-
Pepper, red, Chinese Fukien rice bgs lb.	.89	-
Hainan, bgs ... lb.	1.00	-
Uing, bgs ... lb.	.76	-
Indian, S-4, bgs ... lb.	.70	-
Pakistan, dundicuts, bgs ... lb.	.43	-
Pepper, white, Muntok, bgs ... lb.	2.40	2.45
Peppermint leaves, imp., dms ... lb.	2.65	-
Peppermint oil, Madras ... lb.	14.00	-
Midwest ... lb.	15.00	-
Willamette ... lb.	11.00	-
Yakima ... lb.	6.00	-
syn., dms. f.o.b. works ... lb.	7.00	9.00

CHEMICAL PRICES

WEEK ENDING AUGUST 29, 1986

Perchloroethylene, dry cleaning grade, distr., tanks, dlvd. ....lb.	.28½	-
Indust., grade, consumers, tanks, dlvd. ....lb.	.31	-
Peracid. dms. ....lb.	2.55	-
Permanent red 2B, (red 48), calcium salts, dms., frt. alld. ....lb.	5.26	-
barium salts, same basis ....lb.	5.26	-
Peru balsam, f.o.b. ....lb.	3.25	-
Petitgrain oil, Paraguay ....lb.	5.75	6.25
Petrolatum, USP, snow white, dms., c.l., refy ....lb.	.375	-
tanks, refy ....lb.	.310	-
USP, soft white, dms., c.l., refy. ....lb.	.375	-
tanks, refy. ....lb.	.310	-
USP, lily white, dms., c.l., refy. ....lb.	.370	-
Petrolatum, USP, Lilly white, tanks, refy. ....lb.	.305	-
USP, cream, dms., c.l., refy ....lb.	.365	-
tanks, refy. ....lb.	.30	-
USP, soft yellow, dms., c.l., refy. ....lb.	.350	-
tanks, refy ....lb.	.285	-
USP, amber, dms., c.l., refy. ....lb.	.345	-
tanks, refy ....lb.	.280	-
Petroleum pitch (see Asphalt, petroleum).		
Petroleum sulfonate, 50-62%, sulfonic cont., HMW, bulk, works ....lb.	.48¾	.46
MMW, same basis ....lb.	.46	-
LMW, same basis ....lb.	.49	.49¼
Prices for 51% sulfonic content 2c per lb. lower on corresponding molecular wts.		
Phenacetin USP, powd., 200-lb. dms., 1,000-lb. lots, dlvd ....lb.	2.29	-
100-lb. dms., 1,000-lb. lots, dlvd. ....lb.	2.22	2.45
p-Phenetidine, dms., c.l., f.o.b. ....lb.	2.00	-
Phenobarbital, USP, dms., 500-kilo lots, f.o.b. works ....kilo	19.59	-
Phenobarbital-sodium, NF, 500-kilo lots, f.o.b. works ....kilo	27.00	-
Phenol, syn. tanks, frt. equald. ....lb.	.25	.26
p-Phenolsulfonic acid, 65% sol'n., dms., c.l., f.o.b. works ....lb.	.64	-
tanks, same basis ....lb.	.56	-
Phenothiazine, Indust. grade, 50-lb. bags, c.l., f.o.b. works ....lb.	2.33	-
purif. grade, same basis ....lb.	2.69	-
Phenyl acetate, dms., 100-lb. lots, works ....lb.	1.04	-
Phenylacetic acid, pure cryst., 25-lb. cns. ....lb.	4.50	-
dl-Phenylalanine, dms., 25-kilo lots ....kilo.	64.00	-
1-Phenyl-3-carbethoxy pyrazolone-5, dms. 200-lb. lots, dlvd. E. ....lb.	3.45	-
m-Phenylenediamine, cast, dms., c.l., t.l., f.o.b. works ....lb.	2.07	-
o-Phenylenediamine, flaked, dms., t.l., f.o.b. works ....lb.	3.25	-
p-Phenylenediamine, flaked, dms., f.o.b. works ....lb.	4.00	-
Phenylephrine hydrochloride, USP 100-kilo lots or more ....kilo.	175.00	165.00
Phenylethyl acetate, dms. ....lb.	3.35	-
2-Phenylethyl alcohol, NF, dms. ....lb.	2.65	3.40
b-Phenylethylamine, dms., 30,000 lbs. or more, frt. alld. ....lb.	1.50	-
Phenylethylphenyl acetate, 25-lb. cns. ....lb.	5.50	6.60
Phenylglyconic acid (see Mandelic acid).		
Phenylhydrazine, 69% min., dms. ....lb.	3.50	-
1-Phenyl-3-methyl-5-pyrazolone, dms., 250-lb. lots dlvd. E. ....lb.	1.80	-
o-Phenylphenol, dms., t.l., works ....lb.	1.35	2.00
p-Phenylphenol, bgs., t.l., 40,000 lbs. or more, works ....lb.	1.85	-
Phenylpropanolamine hydrochloride, 100-kilo dm. ....kilo	24.00	28.00
Phenylsalicylate, purif. cryst., dms., E. ....lb.	2.75	-
tech., cryst., E. ....lb.	2.25	-
flake, E. ....lb.	2.35	-
Phloxine toner (red 90), dms., frt. alld ....lb.	1.65	2.05
Phosgene, 1-ton rat. cyls., 5 to 9-cyl. quantities, works ....lb.	.55	.67
Phosphate rock, Fla., land pebble, run of mine washed. 66-68% b.p.l. bulk c.l. mines ....ton	23.15	-
vessel, Tampa, same basis ....ton	28.00	-
Phosphoric acid, com'l. and tech. grades, 75% tanks, works ....100 lbs.	29.00	-
80% tanks, works ....100 lbs.	31.00	-
85% N.F. tanks, f.o.b. freight equald. ....100 lbs.	33.50	-
Food grade prices $2.00 above tech. grade.		
Phosphoric acid, agricultural grade, 52-54% a.p.a., tanks, works ....unit-ton	3.10	-
super, min. 70% a.p.a., same basis ....unit-ton.	3.45	-
Phosphorus, white (yellow) solid dms., c.l., works, frt. equald. ....lb.	1.00	-
tanks, works, f.o.b. works ....lb.	.91	-
Phosphorus oxychloride, tanks, frt. equald ....lb.	.40	-
Phosphorus pentasulfide, powd., dms., c.l., works ....100 lbs.	50.00	-
tote bins, sellers ....100 lbs.	45.00	-
Phosphorus pentoxide, dms., t.l., works ....lb.	.82	-
Phosphorus sesquisulfide, dms., cvs., c.l. works ....lb.	.38	-
Phosphorus trichloride, dms., c.l., works ....lb.	.40	-
tanks, works ....lb.	.35	-
Phthalic anhydride, flake, c.l., t.l., dms., frt. equald ....lb.	.30	.335
molten, tanks, same basis ....lb.	.27	.305
Prices 1-1½c. per lb. higher on the West Coast		
Phthalimide, flake, works ....lb.	.65	-
Phthalocyanine blue toner, red shade, bbls., frt. alld. E. of Rockies ....lb.	6.10	6.50
green shade, same basis ....lb.	6.40	6.60
resinated, bbls., same basis ....lb.	6.20	6.75

Phthalocyanine blue toner, water dispersable, bbls., same basis ....lb.	7.05	7.75
Phthalocyanine green toner, all grades, bbls., frt. alld. E. of Rockies ....lb.	6.10	10.10
Phthalocyanine green toner, resinated, bbls., same basis ....lb.	7.45	9.20
Phthalylsulfacetamide, dms., 500-kilo lots ....kilo.	6.61	-
Picolines, refd, mixed, bulk ....kilo	2.61	-
Picric acid, pure paste, 25-lb. ctns., c.l., dry basis, f.o.b. Charlotte, N.C. ....lb.	6.00	-
tech., paste, 25-lb. cns., t.l., dry basis, f.o.b. Charlotte, N.C. ....lb.	5.00	-
Pigment green 8, kgs. ....lb.	2.20	-
Pilocarpine hydrochloride, USP, dms. ....kilo.	1,500.00	2,000.00
Pimento see Allspice		
Pimento leaf oil, dms. ....lb.	14.50	-
Pine oil, 80% min. alcohol content, bulk, f.o.b. works ....100 lbs	47.00	53.00
dms., c.l., t.l., same basis ....100 lbs	51.00	54.00
a-Pinene, perfume grade ....kilo	1.82	-
tech. grade ....lb.	.16	.23
b-Pinene, perfumery grade, tanks ....kilo	2.30	-
tech. grade, tanks ....lb.	.35	.40
Piperazine, anhyd., dms., t.l., frt. alld. E. ....lb.	1.60	-
Piperazine citrate, 36%, dms., 1,100-lb. lots, frt. alld ....lb.	2.25	2.35
Piperazine dihydrochloride, 53%, dms., t.l., frt. alld ....lb.	2.00	-
Piperazine hexahydrate, 44%, dms., 1,100-lb. lots, frt. alld ....lb.	1.60	-
Piperazine phosphate, 42%, dms., t.l., frt. alld ....lb.	1.60	-
Piperidine dist. 66% min., dms., c.l., t.l., works ....kilo.	6.92	-
Piperonyl butoxide dms., dlvd. E. ....lb.	5.00	-
Platinum, metal, works ....Troy oz.	630.00	-
Polycarbonate resin, pellets, nat., t.l., frt. alld ....lb.	1.84	1.86
Polyester resin, unsaturated, g.p., orthophthalic, bulk, tankcars, frt. alld ....lb.	.51	.53
isophthalic, same basis ....lb.	.56	.62
Polyethylene resin, high-density, blow molding, g.p., hopper cars, frt. alld ....lb.	.43	.46
injection molding, g.p., hopper cars, frt. alld ....lb.	.43	.46
extrusion, g.p., hopper cars, same basis ....lb.	.47	.48
wire and cable, nat. hopper cars, same basis ....lb.	.45	.46
wire and cable, black, same basis ....lb.	.55½	.57
Polyethylene resin, low-density, film liner, hopper cars, frt alld ....lb.	.36	-
clarity film, hopper cars, frt., alld ....lb.	.37	-
pallet shrink film, hopper cars, same basis ....lb.	.35	-
extrusion coating, hopper cars, same basis ....lb.	.36	.42
g.p., hopper cars, same basis ....lb.	.38	.42
Polyethylene linear low-density g.p. resin	.36	.40
blown film resin	.40	.43½
cast film resin	.40	.45
Polyethylene resin, low-density injection molding, g.p., hopper cars, same basis ....lb.	.45	.46
line wire, CATV, power cable ....lb.	.647	-
wire and cable thermoplastic high-voltage, natural color, same basis ....lb.	.70	.74½
wire and cable, XLPE low voltage, 14% carbon black, same basis ....lb.	.67½	.72½
wire and cable jacketing, black ....lb.	.567	.667
Polymyxin sulfate, USP, bulk, 50-billion units min. ....million units	.52	-
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works ....lb.	.73	-
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works ....lb.	.75	-
Polypropylene resin, homopolymer, g.p., nat., t.l., frt. alld ....lb.	.45	.46
copolymer, med. impact, nat., same basis ....lb.	.50	.56
high impact, same basis ....lb.	.53	.60
Colored material 6c. per lb. higher for each grade.		
Polystyrene resin, cryst., nat., hopper cars, frt. alld ....lb.	.48	-
impact, nat., hopper cars, same basis ....lb.	.51	-
high heat, high impact, nat., hopper cars, same basis ....lb.	.52	-
expandable beads (EPS), pkging grade, 1,000-lb. lots ....lb.	.69	-
modified, same basis ....lb.	.73	-
Polyvinyl alcohol, fully hydrolyzed, medium viscosity, bgs., t.l., dlvd ....lb.	1.00	1.05
partially hydrolyzed, medium viscosity, bgs., t.l., dlvd ....lb.	1.05	-
Polyvinyl chloride resin, g.p., homopolymer dispersion, bgs., t.l., dlvd ....lb.	.50	-
g.p. suspension, bulk, same basis ....lb.	.66	-
pipe grade, bulk, same basis ....lb.	.47	-
film grade, bulk, same basis ....lb.	.37	.47
Polyvinyl chloride, g.p. copolymer dispersion, same basis ....lb.	.58	.61
g.p. copolymer suspension, same basis ....lb.	.45	.46
Poppyseed, Dutch, bgs. ....lb.	.48	-
Turkey, bgs. ....lb.	.53	-
Potash agricultural (see Potassium muriate).		
Potash, caustic, liq., 45% basis, tanks, works ....100 lbs.	16.00	-
West Coast, 50% basis, tanks, ex terminal ....100 lbs.	16.06	-
reg. flake, 88-92%, 400-lb. dms., c.l., works ....100 lbs.	42.35	-
Potassium acetate, NF, gran., dms., t.l. works E. ....lb.	.90	1.31
Potassium bicarbonate, tech., gran., bgs., c.l., works ....lb.	.31½	-
Potassium bicarbonate, USP, gran., dms., t.l. ....lb.	.72	-
Potassium bichromate, gran., 400-lb. dms., c.l., t.l., works ....lb.	.48	-

Potassium bifluoride, tech., dms., t.l., works., frt. equald ....lb.	.45	.40
Potassium bitartrate, NF, gran., powd., bgs. ....lb.	.60	1.20
Potassium borohydride, powd. dms., 100-1,000 lbs., works ....lb.	16.00	20.00
Potassium bromate, gran., powd., 200-lb. dms., c.l., f.o.b. works ....lb.	1.06	-
Potassium bromide, NF., gran., dms., c.l. f.o.b. works ....lb.	1.12	-
Potassium carbonate, liq., 47% K_2CO_3, tanks, t.w., works ....100 lbs.	15.40	-
dms., c.l., t.l., works ....100 lbs.	20.55	-
calcined, 86-100% K_2CO_3, hopper cars or trucks, works ....100 lbs.	32.50	-
bgs., c.l., t.l., works ....100 lbs.	36.40	-
Potassium carbonate, hydrated, 83-86% K_2CO_3, dms., c.l., t.l., works ....100 lbs.	34.60	-
bgs., c.l., t.l., works ....100 lbs.	33.70	-
Potassium carbonate, gran., purif., 400-lb. dms., 5-dm. lots ....lb.	.40	.46
Potassium chlorate, cryst., dms., c.l., works ....lb.	.14½	-
powd., dms., c.l., works ....lb.	.30	-
purif., gran., 325-lb. dms., f.o.b. shipping point ....lb.	.40	-
Potassium chloride, chemical grade, 99.65% KCl, bulk, c.l., f.o.b works ....ton	105.00	-
USP cryst. dms. ....lb.	1.12	-
USP gran., dms. ....lb.	.87	-
USP powd., dms. ....lb.	.87	-
Potassium chloride, agricultural (see Potassium muriate).		
Potassium chromate, purif., cryst., dms., works ....lb.	.57	-
Potassium citrate, NF, gran., 200-lb. dms., frt. alld ....lb.	.83½	-
Potassium cyanide, dms., 20,000-lb. lots or more, f.o.b. works ....lb.	1.32	-
Potassium dichromate (see Potassium bichromate).		
Potassium fluoborate, tech., dms., c.l., t.l., works, frt. equald. ....lb.	1.40	1.42
Potassium fluoride, anhyd., dms., t.l. ....lb.	1.56	-
Potassium gluconate, dms., t.l., f.o.b. works ....lb.	1.45	-
Price W. of Denver 4c per lb. higher.		
Potassium guaiacolsulfonate, 300-lb. dms., 600 lbs. or more frt. equald ....lb.	2.10	-
Potassium hydroxide, tech. (see Potash, caustic).		
Potassium hydroxide, USP, pellets, 100-lb. dms., c.l., t.l., works, frt. equald ....lb.	1.26	1.31
Potassium iodide, USP, gran., cryst., dms., 1,000-lb. lots dlvd ....lb.	10.72	12.36
ACS grade truckload ....lb.	11.32	13.55
Potassium-magnesium sulfate, std., bgs., works ....ton	59.00	-
basis 40% K_2SO_4 and 55% $MgSO_4$, bulk, works ....ton	67.00	-
Potassium metabisulfite, gran., dms. t.l. ....lb.	.44	-
Potassium muriate, 60-62.4% min. K_2O, std., bulk, c.l., frt. equald., f.o.b. Sask., Canada ....ton	44.00	45.00
soluble, fine std., f.o.b. Sask. ....ton	46.00	47.00
coarse, f.o.b. Sask. ....ton	46.00	50.00
gran., f.o.b. Sask. ....ton	50.50	51.50
Potassium nitrate, fert. grade, std., 50-ton c.l., dlvd. SE. ....ton	267.00	274.00
prilled ....ton	277.00	284.00
tech., gran., bgs., c.l., min. 50 tons, dlvd. ....ton	470.00	-
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., frt. equald ....lb.	2.54	-
Potassium pentaborate, gran., bgs., c.l., works ....lb.	1.01	-
dms., same basis ....lb.	1.06	-
Potassium pentaborate powder 15c. per lb. higher.		
Potassium perchlorate, dms. c.l., works ....lb.	.76	-
Potassium permanganate, free flowing, bulk, hopper trucks, works ....lb.	1.09	-
50-kg. dms., same basis ....lb.	1.20	-
150-kg. dms., same basis ....lb.	1.17	-
Potassium permanganate, USP, 30-lb. kgs., works, c.l., t.l. ....lb.	1.30	-
Potassium persulfate, 225-lb. dms., 24,000 lbs. or more, f.o.b. plant ....cwt.	76.60	-
c/tl same basis ....cwt.	72.60	-
Potassium pyrophosphate tetrabasic, bgs., c.l., t.l., works, E., frt. equald ....100 lbs.	43.75	47.25
bulk, same basis ....100 lbs.	46.00	46.50
Potassium salicylate, USP, gran., 200-lb. dms., 2,000 lbs. or more, works, frt. alld ....lb.	1.52	-
USP, powd., 300-lb. dms., 2,000 lbs. or more, same basis ....lb.	1.42	-
Potassium silicate, soln., 26.6-30.2 Be., 2.5 ratio, t.c., t.t., works ....100 lbs.	18.60	-
dms., c.l., t.l., works. ....100 lbs.	25.90	-
Potassium silicate, 40-40.5 Be., 2.1 ratio, t.c., t.t., works ....100 lbs.	25.05	-
40-40.5 Be., 2.1 ratio, dms., c.l., t.l., works ....100 lbs.	32.05	-
Potassium silicate, electronics grade, 30-30.4 Be., 2.1-2.2 ratio, t.c., t.t., works ....100 lbs.	26.10	-
dms., c.l., t.l., works. ....100 lbs.	33.10	-
solid or glass, 2.16 ratio, dms., c.l., t.l., works ....100 lbs.	53.60	-
solid or glass, 2.5 ratio, dms, c.l., t.l., works	46.65	-
"Ratio" indicates percentage by weight of SiO_2 divided by percentage by weight of K_2O.		
Potassium silicofluoride, bgs., c.l., t.l., frt. equald ....lb.	.11½	.15
Potassium-sodium tartrate, NF, gran. or powd., dms. ....lb.	.80	1.20
Potassium sorbate, t.l. dms., dlvd. ....lb.	2.20	3.10
Potassium stannate, dms., frt. alld. ....lb.	N.A.	-
Potassium sulfate, agricultural grade, min. 50% K_2O std., bulk, c.l., f.o.b. works ....ton	150.00	160.00
Potassium sulfate, gran., purif. 400-lb. dm. ....lb.	.86	-

Potassium tetraborate, gran., bgs., c.l. works ....lb.	1.10	-
dms., same basis ....lb.	1.15	-
Potassium tetraborate powder 15c. per ton higher		
Potassium thiocyanate, USP, cryst., 225-lb dms., 5-dm. lots ....lb.	4.01	-
tech., cryst., dms., t.l. ....lb.	.82	-
Potassium titanate, ctns., c.l., works ....lb.	.71¼	-
Potassium-titanium fluoride, tech., dms., t.l., works, frt. equald ....lb.	1.24	1.36
Potassium-zirconium fluoride, tech., dms., t.l., works, frt. equald ....lb.	.78	-
Prednisone USP, dms., 5 kilos or more ....gram	1.03	-
Prednisolone acetate, USP, dms., 5 kilos or more ....gram	1.12	-
Prednisolone, anhyd., USP, dms., 5 kilos or more ....gram	1.12	-
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld ....lb.	4.95	5.15
Procaine hydrochloride, USP, ampule grade, dms., 1,000-lb. lots, frt. alld. ....lb.	4.95	5.50
Propionaldehyde, tanks, f.o.b. ....lb.	.36½	-
Propionic acid, syn., pure, tanks, dlvd. E. ....lb.	.33	.34½
n-Propyl acetate, tanks, dlvd. ....lb.	.53½	-
n-Propyl alcohol, tanks, dlvd. ....lb.	.42	.44
n-Propyl gallate dms., 100 to 2,000-lb. lots, dlvd ....lb.	11.50	-
n-Propyl-p-hydroxybenzoate, USP, 500 kilos ....kilo	10.80	-
tech., 500 kilos, f.o.b. ....kilo	10.36	-
Propyl paraben (see n-Propyl-p-hydroxybenzoate)		
Propyl thiouracil, dms., 50-kilo lots or more ....kilo.	55.00	-
n-Propylamine, dms., c.l., dlvd. ....lb.	.75	.80
Propylene, polymer grade, f.o.b. Tex. and La. Gulf Coast points ....lb.	.17½	-
chemical grade same basis ....lb.	.15¾	.16
Propylene glycol, indust., tanks, f.o.b. ....lb.	.40	.41
USP, tanks, f.o.b. E. ....lb.	.43	.44
Propylene glycol monomethyl ether, tanks, dlvd. E. ....lb.	.49	-
Propylene oxide, tanks, f.o.b. works, frt. equald ....lb.	.47½	-
Psyllium seed, USP powd bgs. ....lb.	1.50	1.75
Pumice, dom., fine, 4F-0, bgs., ton lots ....ton	270.00	-
medium, 0½-1½, bgs., ton lots ....ton	300.00	-
coarse, 2-extra coarse, bgs., ton lots ....ton	300.00	-
Pumice, imp., Italian, fines, bgs., ton lots f.o.b. East Coast ....ton	280.00	-
medium, bgs., ton lots, f.o.b. East Coast ....ton	350.00	-
coarse, bgs., ton lots f.o.b. East Coast ....ton	300.00	-
Pyrazolone red (red 38), dms., works ....lb.	5.25	5.35
Pyrethrum flowers, fine grd. 0.9% pyrethrins, ton lots, frt. alld. ....lb.	1.91	-
Pyrethrum, purif., 20% pyrethrins, dms., works ....lb.	37.50	37.75
Pyridine, refd., 2-deg., c.l. works dms. ....kilo	5.90	-
tanks ....kilo	5.70	-
Pyridoxine hydrochloride, USP, 100 kilos or more, dlvd ....kilo	29.00	33.00
Pyrites, Canadian 48-50% S. mines ....long ton	4.50	5.00
Pyrogallic acid (see Pyrogallol)		
Pyrogallol, 100-lb. dms., 1,000-lb., lots, dlvd. ....lb.	13.70	15.25

Q

Quassia chips ....lb.	.57	-
Quinacridone maroon, dms., frt. alld ....lb.	20.75	24.25
red, dms., frt. alld ....lb.	17.75	19.00
scarlet, dms., frt. alld ....lb.	21.75	24.25
violet, dms., frt. alld ....lb.	17.75	19.00
Quince seed, bgs. ....lb.	2.00	2.75
Quinidine sulfate, USP, 1,000-oz. dms., 2,000 oz. or more ....oz.	4.20	4.25
Quinine hydrochloride, NF, 1,000-oz. dms., 2,000 oz. or more ....oz.	2.46	2.50
Quinine sulfate, USP XVIII, 1,000-oz. dms., 2,000 oz. or more ....oz.	2.30	2.50
Quinoline, dms., t.l., frt. equald ....lb.	1.49	-
tanks, same basis ....lb.	1.43	-

R

R salt tech., 304 molecular wt. ....lb.	2.12	-
Racemethionine, USP, 50-250 kilos ....kilo	6.80	-
250-500 kilos ....kilo	6.60	-
500 or more kilos ....kilo	6.50	-
feed grade, 99% min., c.l., t.l. ....lb.	1.07	-
Rapeseed oil, dms. ....lb.	.58½	.62½
Rauwolfia serpentina root, powd. bls., dms. ....kilo	22.00	-
Red carmine, No. 40 (see Carmine No. 40)		
Red precipitate (see Mercuric oxide, red).		
Reserpine, USP, cryst., bots. ....gram	.40	.42½
Resorcinol tech., bgs., t.l. works, dlvd ....kilo.	3.96	-
Resorcinol, USP, cryst., dms. 50 kilos or more, works ....kilo.	9.35	-
powd. dms., same basis ....kilo.	6.90	-
Resorcinol monoacetate, dms., 1,000 lbs. or more ....lb.	1.98	-
Rhodamine red toner, molybdated, PMA, dms., works ....lb.	8.26	-
tungstated, PTMA, dms., f.o.b. works ....lb.	11.50	14.00
Rhodinol, 25-lb. cns. ....lb.	106.00	105.10
syn., dms. ....lb.	16.25	.56
Rhubarb root, India, whole, bgs. ....lb.	.46	.70
powd., bgs. ....lb.	.61	-
Riboflavin, feed grade, 25 kilos, dlvd ....kilo	34.60	46.00
Riboflavin, USP, 25 kilos, dlvd. ....kilo	43.00	-
Riboflavin 5-phosphate-sodium, 25-kilo lots ....kilo	186.00	-

Rice bran oil, refined dms. t.l. ....lb.	1.25	-
Ricinoleic acid (see Castor oil acids, split).		
Rochelle salt (see Potassium-sodium tartrate).		
Roofing pitch (see Coaltar pitch, roofing.)		
Rose oil, nat., NF, Bulgarian, otto, bots ....kilo.	3650.00	3690.00
Turkish, otto, bots ....kilo.	2250.00	3000.00
Rosemary oil, NF, Spanish, dms. ....kilo	6.00	14.50
Tunisian, dms. ....kilo	6.75	15.00
Rotenone resin, 30-45%, 100-lb. dms. works ....unit-lb.	.21	.23

S

Saccharin NF, gran., soluble, dms. 1,000-lb. lots, frt alld ....lb.	2.50	2.75
Saccharin NF, powd., soluble, dms., less than 20,000-lb. lots, frt. alld. ....lb.	3.75	-
Safflower oil, non-break, tanks, N.Y. ....lb.	.47	.50
edible dms., N.Y., dlvd. ....lb.	.63	.67
Sage leaves, Dalmatian, No. 1, bgs. ....lb.	1.60	-
Albanian, bgs. ....lb.	1.40	-
Israeli ....lb.	.60	-
Sage oil, Clary, French, bots ....kilo	90.00	-
Dalmatian, cns. ....lb.	9.50	10.00
Spanish, cns. ....kilo	12.50	-
Salicylaldehyde, tanks, f.o.b. ....lb.	3.60	-
Salicylamide, NF, gran., powd., dms., 2,000-lb. lots, one ship. ....lb.	1.07	1.10
Salicylic acid, tech., dms., c.l., t.l., works ....lb.	1.23	1.41
USP, cryst., dms., 1,000 lbs. or more ....lb.	1.33	1.63
USP, powd., dms., 1,000 lbs. or more ....lb.	1.56	-
Salol (see Phenylsalicylate).		
Salt, evaporated, common, 80-lb. bgs., c.l., t.l., North, works ....80 lbs.	4.02	-
bulk, same basis ....ton	60.00	61.20
chemical grade, same basis ....80 lbs.	4.30	-
Salt, rock, medium, coarse, same basis ....80 lbs.	2.70	-
bulk, same basis ....ton	16.00	25.00
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis, f.o.b. works E ....ton	65.00	96.00
same basis W ....ton	90.00	99.00
Sandalwood oil, E. Indian ....kilo	145.00	-
Indonesia ....kilo	102.00	-
Sarcosine, tech., tanks, works, frt. equald ....lb.	.50	-
Schaeffer's salt, paste, dms., 100% basis, works ....lb.	2.59	-
Scopolamine hydrobromide, USP, 100-oz. lots bots ....oz.	36.00	46.50
Sebacic acid, CP, bgs., c.l., works ....lb.	2.14	-
purif., bgs., c.l., works ....lb.	2.13	-
Seidlitz mixture, dms., 5,000-lb. lots ....lb	.30½	-
Selenium, powd., 99.99% Se, dms., dlvd ....lb	13.00	-
coml., 99.5% Se, same basis ....lb.	10.00	15.00
Senna leaves, Alexandria, whole and half, bls. ....lb.	.75	.80
Tinnevelly, No. 1, bls. ....lb.	.70	.71
powd., bbls., bxs. ....lb.	.90	1.10
Sesame oil, USP, dms., t.c.l. ....lb.	1.00	1.20
Sesame seed, Central American, hulled, bgs. ....lb.	.50	.51
Sienna pigment, burnt, paper bgs., t.c.l., works ....lb.	.19½	.26½
raw, paper bgs., t.c.l., works ....lb.	.16¼	.23¾
Silica, amorph, dry-grd., bgs., c.l., works 93%, 200 mesh ....ton	31.00	32.50
98%, 200 mesh ....ton	32.00	33.50
93%, 97%, 325 mesh ....ton	34.50	35.50
98.5%, 325 mesh ....ton	37.00	-
99.5%, 325 mesh ....ton	51.50	54.50
Silica, dry-grd., bgs., c.l., works, 99.0%, 400 mesh, micronized ....ton	72.00	75.50
99% under 15 microns, micronized ....ton	70.50	82.50
99% under 10 microns, micronized ....ton	104.00	105.00
Silica, hard-quartz, 99.5% SiO_2, 325 mesh, bgs., c.l., works ....ton	37.00	-
140 mesh, bgs., c.l., works ....ton	34.75	-
Silicon tetrachloride, tech., dms., c.l., works ....lb.	.50	-
tanks, works ....lb.	.30	-
Silver bullion, ingots, cs., Troy ....oz.	5.175	-
Silver cyanide, 80% Ag, 500-oz. lots ....oz.	4.16	-
Silver nitrate, ACS, 58.2 Troy oz. AG/100 avoir. oz. $AgNO_3$ ....oz.	3.10	-
Soapbark, crushed, bls. ....lb.	1.00	-
powd, bls. ....lb.	1.36	1.66
Soda ash, dense, 58%, 100-lb. paper bgs. c.l., works, f.o.b. ....ton	120.00	-
bulk, c.l., same basis ....ton	83.00	-
light 58%, 100-lb., paper bgs., c.l., same basis ....ton	160.00	-
bulk, c.l., same basis ....ton	123.00	-
Soda, caustic, liq., 50%, sellers tanks, Gulf Coast works, f.o.b., frt. equal., 76% Na_2O ....ton	175.00	195.00
73%, same basis ....ton	205.00	225.00
flake, 76%, 400-lb. dms., c.l. works ....ton	500.00	670.00
solid, 76%, 700-lb. dms, c.l, works ....ton	520.00	570.00
gran., 76%, 450-lb. dms, c.l, works ....ton	520.00	-
beads, 76%, 400-lb. dms., c.l., works ....100 lbs.	27.50	28.50
Prices for liq. rayon-type, $15 ton higher. Prices in West 70c. higher for solid, and $20–$30 ton higher for gran. and beads.		
Soda, sal, conc., bgs., c.l. works ....100 lbs.	3.35	3.65
Sodium acetate, anhyd., bgs., c.l., f.o.b. works ....lb.	.54	-
Sodium acetate, USP, 60%, gran. 100-lb. dms., c.l., works ....lb.	.57	-
Sodium alginate, NF, white powd., dom., 300 lbs. or more ....lb.	6.00	6.75
Sodium p-aminosalicylate, dms., 100-lb. lots or more, f.o.b. works ....lb.	4.73	-
Sodium antimonate, bgs., c.l., dlvd. E. ....lb.	1.46	1.50
Sodium ascorbate, USP, dms., 100 kilos ....kilo.	8.30	10.60
Sodium benzoate, tech., bgs., c.l., t.l., frt. alld ....lb.	.70½	-
Sodium benzoate, USP, 50-lb. bgs., c.l., t.l., frt. alld ....lb.	.83½	-
ton-lots, same basis ....lb.	.86½	-
100-lb. dms., c.l., t.l., same basis ....lb.	.89	-
ton-lots, same basis ....lb.	.92	-

Sodium bicarbonate, USP, powd., reg. grade, bgs., c.l., t.l., works, frt. equald ....100 lbs.	17.05	-
coarse, same basis ....100 lbs.	16.05	-
fine, same basis ....100 lbs.	17.20	-
gran., same basis ....100 lbs.	17.65	-
gran., fine, same basis ....100 lbs.	17.60	-
Sodium bichromate, gran., bgs. c.l., t.l., works, frt. equald ....lb.	.57	-
Sodium bifluoride, 400-lb. dms., c.l., frt. equald ....lb.	.78	-
100-lb. bgs., c.l., same basis ....lb.	.76	-
Sodium bisulfate, bulk, c.l., works ....ton	175.00	-
dms., c.l. ....100 lbs.	13.00	-
Sodium bisulfite, anhyd. bgs., c.l., t.l., works, East ....100 lbs.	26.50	-
works, West ....100 lbs.	32.00	-
Sodium bisulfite, soln., 38%, bulk, 100% basis, works, East ....100 lbs.	20.60	-
soln., 100%, bulk, works, West ....100 lbs.	20.00	-
photographic grade, 43% soln., works ....100 lbs.	21.90	-
Sodium borate NF, gran., bgs., c.l., works ....lb.	.51	-
powd., same basis ....lb.	.52	-
Sodium borohydride, powd., dms., 1000-5000 lbs. works ....lb.	19.66	21.60
Sodium borohydride, stabilized water soln., 12% $NaBH_4$, 100% basis, 3000 gal tankwagon, works ....lb.	17.45	-
Sodium bromide, 99%, gran., 400-lb. dms., f.o.b. works ....lb.	1.04	-
Sodium carbonate, decahydrate, bgs, c.l., t.l., works ....ton.	264.00	-
Sodium carbonate, cryst. monohydrate (see Soda, ash)		
Sodium carbonate, monohydrated, bgs., c.l., t.l., works ....ton	392.00	-
Sodium carboxymethyl cellulose (see CMC.)		
Sodium chlorate, bulk, t.c., t.l., f.o.b. works ....ton	420.00	440.00
Sodium chlorate, cryst., 450-lb. dms., c.l., works. E. ....lb.	.27	-
Sodium chloride, tech. (see Salt.)		
Sodium chloride, USP, gran., bgs. ....lb.	.28	-
Sodium chlorite, tech., dms., c.l., works ....lb.	1.17	1.27
Sodium chromate, anhyd., dms., c.l., t.l., works ....lb.	.67	-
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works ....lb.	.64	-
Sodium citrate, gran., anhyd., 200-lb. dms., c.l., t.l., N.Y. ....lb.	1.95	-
Sodium citrate, USP, gran., dihydrate, 100-lb. bgs., t.l., f.o.b. shipping point ....lb.	.74½	-
Sodium cyanate, dms. 1,000-lb. lots, works ....lb.	.65	-
Sodium cyanide, briquettes or gran., 99% min., 200-lb dms, min., f.o.b. works ....lb.	.66	-
Sodium diacolate, anhyd., dms., c.l. works ....lb.	.66	-
Sodium diacetate, FCC, 50-lb bgs., t.l., dlvd E. of Rockies ....lb	.51	.67
Sodium diacetate, tech., 50-lb. dms., c.l., works ....lb.	.52	-
Sodium erythorbate, powd., gran., t.l. or mixed t.l., f.o.b. shipping point ....lb.	2.60	2.65
Prices W. of Denver 2c. per pound higher.		
Sodium ferrocyanide, bgs, t.l., works ....lb.	.60	-
Sodium fluoborate, tech., gran., dms., t.l., works, frt. equald ....lb.	1.77	-
Sodium fluoride, white, 97%, 400-lb. dms., c.l., works, frt. equald. ....lb.	.6345	-
100 bgs., c.l., same basis ....lb.	.60	-
USP powd., 200-lb. dms., t.l., f.o.b. shipping point ....lb.	4.69	-
Sodium formate, bgs., c.l., works ....lb.	.20	-
Sodium gluconate, tech., 50-lb. bgs., 2,500 lbs. or more frt. alld. ....lb.	.60	-
Sodium hydride, oil dispersion, 60% NaH, 167-lb. dms., 10 dms., works ....lb.	1.65	-
Sodium hydrosulfide (see Sodium sulfhydrate.)		
Sodium hydrosulfite, dms., c.l., t.l., f.o.b. shipping point E ....lb.	.64	-
Sodium hydroxide, USP, pellets, 100-lb. dms., c.l., t.l., works, frt. equald ....lb.	.65	.86
Sodium hydroxide, tech. (see Soda, caustic.)		
Sodium hypophosphite, EN grade, 300 lb. dms. f.o.b. works ....lb.	1.425	1.60
110 lb. dms. ....lb.	1.47	1.52
Sodium hyposulfite (see Sodium thiosulfate).		
Sodium iodide, USP, cryst., 300- to 500-lb. lots. dms. frt. equald ....lb.	14.72	-
Sodium lauryl sulfate, 30%, tanks, f.o.b. works ....lb.	.26	.32
Sodium lignin sulfonate, bgs., c.l., works ....100 lbs.	25.50	-
Sodium metabisulfite (see Sodium bisulfite).		
Sodium metaborate, octahydrate, gran., bgs., c.l., works ....lb.	.38	-
tetrahydrate, gran, bgs, c.l., works ....lb.	.46	-
Sodium, metallic, 12-lb. bricks, dms., c.l. works ....lb.	.83	-
fused, dms. 24,000-lb. lots or more, works ....lb.	.67	-
tanks, works ....lb.	.70	.80
Sodium metaphosphate, tech, bgs., c.t., f.o.b. shipping pt. frt. equald ....100 lbs.	61.50	-
food grade, bgs, c.l. f.o.b, frt. equald. ....100 lbs.	66.25	-
Sodium metasilicate, anhyd., bgs., c.l. works ....100 lbs.	27.25	-
bulk, c.l., works ....100 lbs.	25.30	-
pentahydrate, bgs., c.l., f.o.b. shipping point ....100 lbs.	18.95	-
bulk, c.l. works ....100 lbs.	17.20	-
Sodium molybdate, anhyd., dms. f.o.b. works, 100 lbs and over ....lb.	4.67	-
cryst., dms., t.l. same basis ....lb.	4.12	-
Sodium naphthionate, dms., c.l., t.l., f.o.b. works ....lb.	2.00	-
Sodium Nitrate, USP, bgs., c.l., f.o.b., frt. equald ....100 lbs.	34.50	-
Sodium nitrate, dom., industrial, bgs., c.l., works ....ton	284.00	292.00
bulk, c.l. works ....ton	250.00	-
imp., coml., 100-lb. bgs., c.l., All, or Gulf whse. ....ton	205.00	214.00
bulk, c.l., same basis ....ton	162.00	-
imp., agricultural, bulk, c.l., same basis ....ton	140.00	-
Sodium nitrite, USP, dms., c.l., works, frt. equald ....100 lbs.	37.25	-

Sodium orthosilicate, tech., anhyd., bgs., c.l., works ....100 lbs.	34.50	-
Sodium orthosilicate, tech., hydrated, flake, dms., c.l., works ....100 lbs.	27.45	-
bgs., c.l., works ....100 lbs.	26.25	-
Sodium oxalate, 99%, bgs., t.l., works ....lb.	.45	-
Sodium pentachlorophenate, beads c.l., 30,000-lb min. ....lb.	.67	-
bgs ....lb.	.66	-
Sodium pentobarbital (see Pentobarbital-sodium).		
Sodium perborate, tetrahydrate, tech., bgs., c.l., t.l., works ....lb.	.32½	.36½
Sodium persulfate, 225-lb. dms., 24,000 lbs. or more, f.o.b. plant ....lb.	.63½	-
55-lb. bgs. same basis ....lb.	.62	-
Sodium phenobarbital (see Phenobarbital-Sodium).		
Sodium phenosulfonate, powd., dms. ....lb.	.76	-
Sodium phosphate, anhyd., dibasic tech., bgs., c.l., t.l., works, frt. equald ....100 lbs.	54.50	-
food grade, same basis ....100 lbs.	57.50	-
Sodium phosphate, monobasic, tech., same basis ....100 lbs.	65.75	-
food grade, same basis. ....100 lbs.	59.75	-
tribasic, tech., same basis. ....100 lbs.	52.25	52.75
food grade, same basis. ....100 lbs.	63.25	-
chlorinated, same basis. ....100 lbs.	31.50	-
cryst., tech., same basis. ....100 lbs.	30.60	-
cryst., food grade, same basis ....100 lbs.	65.50	-
USP, dried, powd., bgs., dms., works ....lb.	.16	.20½
Sodium picramate, tech., paste. 200-lb. dms., dry basis, dlvd. ....lb.	5.50	-
Sodium propionate, dms., 2,000 lbs. or more, f.o.b. frt. alld ....lb.	.54	-
Sodium pyrophosphate, acid, tech., bgs., c.l., works, frt. equald. ....100 lbs.	58.25	-
food grade, non-leavening, bgs., c.l., works. frt. equald. ....100 lbs.	61.25	-
Sodium pyrophosphate, ferric, dms., c.l., t.l., works ....lb.	.3880	-
Sodium pyrophosphate, tetrabasic, anhyd., tech., bgs., c.l., t.l., works, frt. equald ....100 lbs.	44.75	-
bulk, hopper cars, same basis ....100 lbs.	42.60	-
food grade, bgs., c.l., t.l., same basis ....100 lbs.	53.00	-
Sodium salicylate, USP, cryst., 200-lb. dms., 1,000-lb. lots or more, works, frt. equald ....lb.	3.00	-
USP, powd., 200-lb. dms., 1,000-lb. lots or more, same basis ....lb.	3.05	-
Sodium sesquicarbonate, bulk, c.l., t.l., works ....ton	170.00	-
bgs, c.l, t.l. works ....100 lbs.	196.00	-
Sodium silicate, solid, or glass, 3.22-3.25 ratio, bulk, c.l., t.l., works ....100 lbs.	15.70	-
bgs., c.l., t.l., works ....100 lbs.	27.75	-
1.95-2.00 ratio, bulk, c.l., t.l., works ....100 lbs.	20.30	-
bgs., c.l., t.l., works ....100 lbs.	22.15	-
soln., 37.6° solid, 3.22-3.25 ratio, bulk, c.l., t.l., frt. equald ....100 lb.	6.30	-
"Ratio" indicates percentage by weight of SiO_2 divided by percentage by weight of Na_2O.		
Sodium silicofluoride, bgs., c.l., t.l., works, frt. equald ....100 lbs.	17.95	16.75
Sodium stannate, dms. wks. frt. alld. E. ....lb.	N.A.	-
Sodium sulfanilate, dms, works ....lb.	.22	-
Sodium sulfate, NF XII, powd., dms., 2,000-lb. lots ....lb.	.23½	-
tech., detergent, rayon-grade, c.l., works. Gulf ....ton	90.00	96.00
Sodium sulfate, West, bulk, c.l., works, frt. equald ....ton	60.00	101.00
bulk, c.l., East, same basis ....ton	113.00	114.00
Sodium sulfate, photo grade, 100-lb. bgs., c.l., works ....ton	47.00	53.00
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald ....ton	500.00	-
liq., 44-46%, tanks, works, frt. equald ....ton	500.00	-
Sodium sulfide, flake, dms., c.l., works, E., frt. equald ....ton	470.00	-
bgs., same basis ....ton	410.00	-
Sodium sulfide, fused, dms., c.l., works, E., frt. equald ....ton	240.00	-
Sodium sulfite, anhyd., tech. 95-100% bgs, f.o.b. works ....100 lbs.	23.76	-
Sodium sulfocyanide CP (see Sodium thiocyanate).		
Sodium tetraborate (see Borax).		
Sodium tetrasulfide, liq. 34%, dms., c.l., works., frt. equald ....ton	540.00	-
Sodium thiocyanate, purif., cryst, 250-lb. dms., 6 dms. or more f.o.b. works ....lb.	6.26	-
tech., anhyd. dms., 2,000 lbs. or more, works ....lb.	.97	-
Sodium thiosulfate, tech., photo grade, anhyd., 100-lb. bgs., c.l., t.l., works, frt. equald ....100 lbs.	45.50	-
cryst. pentahydrate, c.l., t.l., same basis ....100 lbs.	28.50	-
Sodium titanate, dms., c.l., works ....lb.	.14¼	-
Sodium trichloroacetate, 95%, 50-lb. bgs., c.l., frt. alld. E. ....lb.	.28	-
Sodium tripolyphosphate, tech., bgs., c.l., t.l., works, frt. equald ....100 lbs.	39.75	-
bulk, hopper cars, same basis ....100 lbs.	37.50	-
food grade, bgs., c.l., t.l., same basis ....100 lbs.	46.50	-
Sodium tungstate, tech. high moly., dms., 10,600 lbs. or more, frt. alld ....lb.	6.00	6.50
Folin grade dms., 10,600 lbs. or more, same basis ....lb.	8.00	-
Sodium-ammonium phosphate, purif., cryst., dms., works ....lb.	.52	-
Sodium-formaldehyde sulfoxylate, dms., t.l., f.o.b. works ....lb.	.91	-
Sodium-zirconyl sulfate, dms., 1,000-lb. lots or more, works ....lb.	.28	-
tech., dms., any quantity, works ....lb.	.16	-
Solvent naphtha, petroleum, straight aromatic, b.r. 320°-350°F, 56°F m.a.p., tanks:		
New Jersey ....gal.	1.52	-
Houston ....gal.	1.41	-
Illinois ....gal.	1.54	-
Solvent naphtha, petroleum, straight aromatic, b.r. 360°F-410°F, 60°F m.a.p., tanks:		
New Jersey ....gal.	1.30	1.65
Houston ....gal.	1.30	-
Illinois ....gal.	1.30	1.35
Sorbic acid, t.l. dms., dlvd. ....lb.	2.20	6.10

CHEMICAL PRICES

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Sorbitan monostearate, dms., c.l., t.l., 30,000 lb. min., f.o.b. works ....lb.	.76	-
Sorbitan tristearate, c.l., t.l., 39,000 lb. min., f.o.b. works ....lb.	.80	-
Sorbitol, USP, reg. 70% aqueous, dms., c.l., f.o.b. shipping point ....lb.	.35	-
tanks, f.o.b. shipping point ....lb.	.30	-
gran., dms., c.l. t.l., works ....lb.	.70	.74
powd., dms., c.l., t.l., works ....lb.	.66	.72
Soybean meal (See Oils, Fats & Waxes market report.)		
Soybean oil (See Oils, Fats & Waxes market report.)		
Soybean oil acidulated, soapstock, 65% acid, tanks, New York ....lb.	.14	.15
Soybean oil, acid, dbl., dist., dms ....lb.	.48	.59
tanks ....lb.	.43	.44
s.d., dms. ....lb.	.47	.56
tanks ....lb.	.36	.43
Spearmint leaves, imp., bls. ....lb.	2.50	2.70
Spearmint oil, Far West, native ....lb.	14.00	15.00
Midwest, native ....lb.	19.00	12.00
Far West, Scotch ....lb.	15.00	15.50
Midwest, Scotch ....lb.	14.59	15.25
Spruce oil, dms. ....lb.	6.09	-
St. John's bread, edible, bls ....lb.	.29	.30
zStannic chloride, anhyd., dms., works ....lb.	N.A.	-
Stannic oxide, dms., works ....lb.	N.A.	-
Stannous chloride, anhyd., dms. wks ....lb.	N.A.	-
Stannous fluoborate, liq., conc., dms., t.l., works, frt. equald ....lb.	2.50	-
Stannous oxide, dms., works ....lb.	N.A.	-
Stannous sulfate, dms., works ....lb.	N.A.	-
Stearic acid, double pressed, bulk ....lb.	.26	.39
single-pressed, bulk ....lb.	.26	.375
triple-pressed, bulk ....lb.	.32	.40
Stramonium leaves, bgs ....lb.	.15	.20
Streptomycin sulfate, USP, bulk ....kilo.	47.00	-
Strontium carbonate, glass grd., bgs., t.l., works ....lb.	.37½	-
Strontium nitrate, 50-15 bgs., c.t., works ....100 lbs.	51.50	-
Styrene monomer, 99.6% min., t.c., t.l., f.o.b. works ....lb.	.21	-
Styrene-acrylonitrile resin, nat., bulk, f.o.b. plant ....lb.	.77	-
cryst., bulk, same basis ....lb.	.77	.81
clear, same basis ....lb.	.77	.81
Styrol acetate, dms. ....lb.	2.35	-
Succinic acid, purif., cryst., dms., t.l., frt. alld ....lb.	2.00	2.10
Succinic anhydride, dms., c.l., t.l., f.o.b. work ....lb.	1.71	-
Sucrose, refd., white, bgs., c.l., f.o.b. refy. E. ....100 lbs.	33.10	-
Sucrose acetate, isobutyrate, 90% dms., t.l., dlvd ....lb.	1.18	-
tanks, dlvd. ....lb.	1.10	-
100%, dms., t.l., dlvd ....lb.	1.18	-
Sucrose octa-acetate, denaturing grade, 100-lb. dms., f.o.b. works ....kilo	12.50	13.50
Sulfabenzamide, dms., 500 kilos ....kilo.	39.50	-
Sulfabenzamide-sodium, dms., 500 kilos ....kilo.	25.00	-
Sulfacetamide, USP, dms., 500 kilos ....kilo.	20.00	23.50
Sulfadiazine, USP, powd. dms., 500 kilos ....kilo.	53.00	-
Sulfadiazine-sodium, USP, dms., 500 kilos ....kilo.	40.70	-
Sulfamerazine, USP, microcrystals, dms., 500 kilos ....kilo.	33.50	-
USP, powd., dms., 500 kilos ....kilo.	32.00	-
Sulfamethazine-sodium, USP, powd. dms., 50 kilos ....kilo.	16.00	-
Sulfamethazine, powder, dms., 500 kilos ....kilo.	9.50	10.00
Sulfamic acid, cryst., bgs., c.l., t.l., works ....100 lbs.	38.00	41.00
Sulfamic acid, gran., dms., c.l., t.l., works ....lb.	.36	-
Sulfanilamide, NF, reg. 1,000-lb. dms., frt. equald ....lb.	2.00	-
Sulfanilic acid, tech., bgs., t.l., f.o.b. works ....lb.	.67½	-
Sulfaquinoxaline, veterinary, grade, dms. ....lb.	8.00	-
Sulfur, crude, bright, molten, dom., f.o.b. vessels, Gulfports ....long-ton	150.00	-
f.o.b. La. refy ....long-ton	125.50	-
recovered, dlvd., Houston ....long-ton	125.50	-
ex terminal, Rotterdam ....long ton	135.00	-
f.o.b. tanks, Alberta, Canada, for US delivery ....long-ton	102.00	-
dark, ex-Tampa, Fla. ....long-ton	157.50	-
Sulfur, crude, 99.5% min. purity, coml. flour, 50-lb. bgs., c.l., mines basis ....100 lbs.	13.60	-
lump, same basis ....100 lbs.	13.60	-
Sulfur, refd., 99.5% min. purity, rolls 50-lb. bags, c.l., mines basis ....100 lbs.	17.50	-
flour, light, 50-lb. bgs., same basis ....100 lbs.	20.00	-
Sulfur, refd., sublimed, NF, 99.85% min. purity, 50-lb. bgs., c.l., mines basis ....100 lbs.	26.00	-
Sulfur, rubbermakers, 99.5% min. purity, coml., reg., 50-lb. bgs., c.l., mines basis ....100 lbs.	14.60	-
fine, 98% min. passing through 325 mesh, same basis ....100 lbs.	16.10	-
Sulfur dichloride, dms., c.l., works, frt. equald ....lb.	.24	-
tanks, same basis ....lb.	.17¾	-
Sulfur dioxide, liq., coml. multi-unit cars, dms., f.o.b. works ....ton	275.00	-
tanks, works ....ton	210.00	220.00
Sulfur monochloride, dms., c.l., works, frt. equald ....lb.	.22½	-
tanks, same basis ....lb.	.16¼	-

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Sulfuric acid, virgin 100% tanks, works,			
East Coast	ton	71.75	95.90
Gulf Coast	ton	75.00	86.40
Midwest	ton	80.25	–
Southeast	ton	68.15	–
West Coast	ton	85.00	–
NOTE: For prices on 60 and 88 Be., multiply by .7767 and .9319, respectively. For price of 20% fuming oleum, as is, add \$3-\$4 to above prices and multiply by 1.045.			
Sulfuric acid, smelter, 100% tanks, works.			
Gulf Coast	ton	48.00	52.00
New Mexico	ton	20.00	25.00
Southeast	ton	63.15	–
93%, tanks, divd., Northwest	ton	60.00	65.00
Sunflowerseed oil, crude, f.o.b. Minneapolis	lb.	.15½	.17¼
Superphosphate, triple, 46% or more, a.p.a., run-of-pile, bulk, c.l., Fla.	unit-ton	2.75	3.05
bulk, gran., c.l., Fla.	ton	180.00	185.00

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Talc, dom., grd. New York bgs., c.l., works	ton	84.00	–
99.5%, 325 mesh, bgs., c.l., works	ton	84.00	80.00
Talc, dom., 86.5%, 400 mesh, micronized, bgs., c.l., works	ton	187.00	238.00
625 mesh, micronized, bgs., c.l., works	ton	200.00	–
dom., ord., Calif. grd., bgs., c.l., works	ton	90.00	–
ord., Vermont, off-color grd., bgs., c.l., works	ton	136.00	–
Imp., Canadian, grd., bgs., c.l., works	ton	70.00	84.00
Tall oil, crude, Southeast, tanks, works, frt. equald.	ton	135.00	140.00
Tall oil, refd., acid, same basis	lb.	.31	–
dist., tanks, same basis	lb.	.19	.23
Tall oil acids, 2% or more rosin, tanks, works, frt. equald.	lb.	.20½	.23½
less than 2% rosin acid	lb.	.22	.27
Tallow (see Oils, Fats & Waxes market report.)			
Tallow, fatty acids, tech., non-ref. dms., c.l., divd.	lb.	.37	.40
tanks, divd.	lb.	.29	.45
hydrogenated, tech., flake, bgs., c.l., divd.	lb.	.37	.33
tanks, divd.	lb.	.35	.42
Tangerine oil, Fla., dms. f.o.b.	lb.	10.50	11.00
Italian, dms.	kilo	52.90	–
Tankage, animal feeding, 9-11%, NH_3, New York, bulk	unit-ton	5.50	–
Tankage, fert. grade (see Nitrogenous process tankage).			
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots	lb.	8.09	–
tech., powd., dms.	lb.	4.62	–
Tar acid oil, 15-18% t.l., dms., f.o.b works	gal.	1.40	–
25-28%, t.l., dms., f.o.b. works	gal.	1.59	–
50-53%, t.l., dms., f.o.b. works	gal.	1.67	–
Tartaric acid, NF, bgs.	lb.	1.20	1.50
Tellurium, metallurgical, f.o.b. works	lb.	12.00	–
Terpin hydrate, NF, imp., cryst., powd., 36 kilo drums, f.o.b. ship. pt., frt. equald.	lb.	1.35	–
Terpineol	lb.	1.10	1.60
Terpinyl acetate, extra, dms	lb.	2.40	–
prime, dms.	lb.	1.36	2.05
Terpinyl propionate, dms	lb.	4.50	–
Tetrachloroethylene, tech. (see Perchloroethylene).			
Tetrachloroethylene, USP, dms., c.l., t.l., works	lb.	.30¼	–
Tetraethyl orthosilicate, bulk, f.o.b. works	lb.	1.53	1.66
Tetraethylene glycol, tanks, frt. alld.	lb.	.67	–
Tetraethylene glycol diacrylate, t.l. dms., f.o.b. works	lb.	1.50	–
Tetraethylenepentamine, tanks, same basis	lb.	1.70	1.75
Tetraethylthiuram disulfide, tech., flake, dms., t.l., frt. alld.	lb.	.58	2.07
Tetrahydrofuran dms., c.l., t.l., f.o.b. works	lb.	1.02	–
tanks, same basis	lb.	.96	–
Tetrahydrofurfuryl alcohol tanks, f.o.b. Memphis, Tenn.	lb.	.80	–
Tetrahydrolinalool, syn., dms.	lb.	7.20	–
Tetrahydrophthalic anhydride dms., c.l., t.l. f.o.b. works	lb.	.65	–
Tetrapotassium phosphate (see Potassium phosphate, tetrabasic).			
Tetrasodium pyrophosphate (see Sodium pyrophosphate, tetrabasic.)			
Thallium metal, divd.	lb.	35.00	–
Thallium sulfate, 99%, bots., divd.	kilo	140.00	–
Theobromine, bulk f.o.b. works	lb.	4.00	4.50
Theophylline, USP, anhyd. 50-kilo dms., 10,000-kilo lots	kilo	12.00	12.95
Thiamine hydrochloride, USP 100-kilo dms., divd.	kilo	27.00	31.00
Thiamine mononitrate, USP, 100-kilo., dms., divd.	kilo	27.00	31.00
Thiodiphenol, 66%, dms., f.o.b. works	lb.	3.35	–
Thioflavin green toners, molybdated, PMA, dms.	lb.	5.40	6.05
tungstated, PTA, dms.	lb.	5.60	5.85
Thioglycolic acid, refd., dms., ton lots 100% acid basis	lb.	2.07	–
Thioindigoid maroon, dms., frt. alld.	lb.	7.50	–
reds, dms., frt. alld.	lb.	5.88	5.12
Thionyl chloride, high-purity, 99.8%, 24,000-lb. min. t.l., dms. frt. equald.	lb.	.55	–
Thorium nitrate, purif., dms., 100-lb. lots or more, works	lb.	2.75	–
dl-Threonine, dms 10 kilos wks	kilo	128.00	–
Thyme leaves, French, bgs.	lb.	.92	.95
Spanish, bgs.	lb.	.71	1.15
Thyme oil, NF, red, dms.	kilo	20.00	–
NF, white, dms.	kilo	22.00	–
Thymol, NF	lb.	3.75	8.15
Thymol iodide, dms., 100-lbs. f.o.b. works	lb.	52.30	56.20
Tin metal (NY composite)	lb.	N.A.	–
Titanium dioxide, anatase, bgs., 20-ton lots, frt. alld.	lb.	.73	.74
slurry shipments, 50-ton lots, dry basis, frt. alld.	lb.	.72	.74
Titanium dioxide, rutile, reg., bgs., 20-ton lots, frt. alld.	lb.	.76	–
slurry shipments, 50 ton lots, dry basis, frt. alld.	lb.	.80	–
Non-chalking rutile material costs 1c. per pound more.			
Titanium hydride powd. electronics grade, dms.	lb.	26.50	–
Titanium tetrachloride, tech., bulk, c.l., f.o.b. works	lb.	.80	.35
200-gal cylinders c.l., same basis	lb.	.50	–
Titanium sponge, 99.3%, fiber drums, less than 5,000 lbs. f.o.b. wks.	lb.	4.85	–
Tobias acid, 2,000 lbs. or more	lb.	2.45	–
d-a-Tocopherols, 67%, dms.	kilo	50.08	–
d-a-Tocopheryl acetate, 81% conc., dms.	kilo	57.46	–
d-a-Tocopheryl acid succinate, cryst., dms.	kilo	78.44	–
di-a-Tocopherol, dms.	kilo	27.40	–
dl-a-Tocopheryl acetate, USP 50-kilo dm. 1000 kilo min.	kilo	16.00	18.50
50% dry powd., 50-kilo dm.	kilo	17.00	–
Tolu balsam, cns.	lb.	7.80	8.66
Toluene, petroleum, ind. or nitration, tanks			
Atlanta, Ga., divd.	gal.	.73	–
Bayonne, N.J., divd.	gal.	.73	–
Baytown, Tex., f.o.b.	gal.	.73	–
Chicago, Ill. divd.	gal.	.73	–
Clairton, Pa., f.o.b.	gal.	.73	–
Deer Park, Tex., f.o.b.	gal.	.73	–
Ft. Wayne, Ind., divd.	gal.	.73	–
Gulf Coast, spot, barges	gal.	.66	.67
Houston, Tex., divd.	gal.	.73	–
New Jersey Metro, divd	gal.	.73	–
Philadelphia, Pa., divd.	gal.	.73	–
Providence, R.I., divd.	gal.	.73	–
Toluene di-isocyanate (mixed isomers), 80%, 2,4- and 20% 2,6-isomers, jumbo tankcars, divd.	lb.	1.01	–
p-Toluenesulfonamide, powd., dms., t.l., works	lb.	3.55	–
m-Toluidine, tech., bulk	lb.	3.10	–
o-Toluidine, tech., liq., dms. c.l.	lb.	.72	.75
bulk, same basis	lb.	.80	.84
p-Toluidine, tech. cast solid, dms., c.l., works	lb.	1.80	1.85
Liq., tanks, same basis	lb.	1.70	–
flake, same basis	lb.	1.85	–
Toluidines, mixed, o-m-p, tech., liquid, c.l. f.o.b. works	lb.	1.03	–
bulk same basis	lb.	.95	–
Tolyltriazole, dms., 1,000-lb. lots, f.o.b. Cincinnati, Ohio	lb.	2.90	–
Tonka beans, Angosture, prime, 1,000-lb. lots	lb.	8.50	–
Toxaphene, dms., c.l., t.l., works	lb.	.36	–
Tragacanth gum, No. 1, ribbons, cns.	lb.	36.00	40.00
flaked powder	lb.	12.50	15.00
Triacetin tanks, divd. E	lb.	.75	–
Tributyl citrate, t.l., drums, f.o.b., works	lb.	1.70	–
Tributyl phosphate, tanks, works	lb.	1.65	1.77
Tributylamine, dms., c.l., divd.	lb.	1.39	–
tanks, same basis	lb.	1.33	–
Trichloroacetic acid, tech., 300-lb. dms., c.l., f.o.b., works	lb.	.94	–
USP, 100-lb. dms., frt. equald.	lb.	.99½	–
1,2,4-Trichlorobenzene, pure, tanks, divd.	lb.	.61½	–
1,1,1-Trichloroethane, tanks, consumers, divd.	lb.	.40½	–
1,1,2-Trichloroethane, tanks, f.o.b. works	lb.	.42	–
Trichloroethylene, tanks, divd.	lb.	.38½	–
Trichloroisocyanuric acid, dms.	lb.	1.25	–
Trichlorophenoxyacetic acid (see 2,4,5-T).			
Tricholine citrate, 65%, soln., non-ret. dms., 1,500-lb. lots, divd.	lb.	1.35	–
Tricresyl phosphate, tanks, f.o.b. works	lb.	1.55	1.60
Tridecyl alcohol, mixed isomers, tanks, divd.	lb.	.57	–
Triethanolamine, 85%, tanks, divd. E.	lb.	.45	.48
99%, tanks, same basis	lb.	.45	.48
Triethanolamine lauryl sulfate, tanks, f.o.b. works	lb.	.27¼	.27½
Triethylamine, dms., c.l., divd.	lb.	1.38	–
tanks, same basis	lb.	1.20	–
Triethyl citrate, t.l., drums, f.o.b., works	lb.	1.82	–
Triethyl phosphate, tanks, divd.	lb.	1.15	–
Triethylene glycol, tanks, f.o.b. Gulf	lb.	.47	–
Triethylene glycol dipelargonate, tanks f.o.b. works	lb.	.29½	–
40-60% tanks, 100% basis, frt. equald.	lb.	.35	–
Triethylenetetramine tanks, frt. equald.	lb.	1.43	1.45
Tri-iso-tolyl trimellitate, f.o.b. works	lb.	.51	.55
Tri-isobutylene, tanks, divd.	lb.	.45	–
Tri-isopropanolamine, dms., c.l., frt. alld. E.	lb.	.57½	–
Trimethylamine, anhyd., tanks, frt. equald., 100%	lb.	.54½	–
25% soln., tanks, frt. equald., 100% basis	lb.	.63½	–
40% soln., tanks, frt. equald., 100% basis	lb.	.56½	.57
Trimethylolpropane bgs c.l. t.l. divd.	lb.	.73	–
Trimethylolpropane triacrylate, t.l. dms., f.o.b. works	lb.	1.50	–
Tripentaerythritol, tanks, frt. alld., E.	lb.	1.00	–
Triphenyl phosphate, dms., t.l., frt. equald.	lb.	1.84	.76
Tripropylene glycol tanks, frt. alld. E.	lb.	.64	–
Tris-(hydromethyl) nitromethane, solid, t.l. works	lb.	.605	–
Trisodium phosphate (see Sodium phosphate, tribasic)			
l-Tryptophan, dms, 25-kilo lots	kilo	62.00	65.00
Tung oil, tanks, imp. New York	lb.	.32	.34
Tungstic acid 62½%, dms., 1,750-3,000 lbs., works	lb.	12.85	–
Turmeric, Alleppey	lb.	.64	–
Turmeric, Alleppey	lb.	.95	1.10
Turpentine, crude sulfate tanks, f.o.b. Southeast works	gal.	.70	.80

U

Ultramarine blue pigments, 550-2,000 lb.-lots, works	lb.	1.30	–
violet, same basis	lb.	2.20	–
Umber pigment, burnt, American, frt. equald.	lb.	.13½	.15½
raw, American, dom., bgs., l.c.l., same basis	lb.	.13½	.14¾
Undecylenic acid, dms., works	lb.	2.70	–
Urea, 48% N, ind., bulk, 50-ton c.l., divd.	ton	200.00	220.00
48% N, agricultural, bulk, divd. Midwest	ton	200.00	215.00
48% N, agricultural, bulk, divd. West	ton	210.00	–
Uva-Ursi leaves, bls.	lb.	.22	–

V

Valerian root, Belgian, bgs.	lb.	.65	.85
Indian, bgs.	lb.	.45	–
Vanadium oxytrichloride, 3,000 lb. cyls., works	lb.	5.40	–
Vanadium pentoxide, tech., gran., per lb. of V_2O_5, 550-lb. dms., works	lb.	4.10	4.94
fused or flake, per lb. V_2O_5, 550-lb. dms., works	lb.	3.35	3.85
Vandyke brown, bags, l.l., frt. equald.	lb.	.27¼	–
Vanilla beans, Madagascar	lb.	37.00	–
Java, tins	lb.	27.00	30.00
Vanillin, USP, dms., f.o.b works	lb.	6.25	–
Imp., dms.	lb.	4.75	5.00
Versinol Aq	lb.	.84	–
Vetiveryl acetate, dms.	kilo	80.50	–
extra	lb.	83.00	–
Vetiver oil, Bourbon, dms.	lb.	18.00	17.00
Haitian	lb.	28.00	–
Java	kilo	31.00	–
Victoria blue toners, molybdated, PMA dms.	lb.	8.20	6.30
tungstated, PTA, dms.	lb.	10.40	–
Vinyl acetate monomer, tanks, divd.	lb.	.39	–
Vinyl chloride monomer, polymer grade, tanks, f.o.b. works	lb.	.28	–
Vinyl ether, USP, anesthesia, 75-cc. bots., hospitals	bots.	1.58	–
2-Vinylpyridine t.l., dms. works	kilo	7.81	–
tanks, works	kilo	7.81	–
Vinyltoluene, bulk, f.o.b.	lb.	.67	.73½
Vitamin A, synthetic, dry, pharm., 500,000 A units per gm., 50-kilo lots	kilo	33.00	–
Vitamin A, liq. in oil, pharm., 1,000,000 A units per gram, 10 kilo lots	kilo	41.00	–
Vitamin A, feed grade, 650,000 units per gm.	kilo	18.70	23.85
Vitamin B_1 (see Thiamine hydrochloride).			
Vitamin B_2 (see Riboflavin and Yeast).			
Vitamin B_{12}, cryst., non-sterile, USP (cyanocobalamin), vials, 50-gram, lots	gram	8.00	8.75
Vitamin B_{12} 1% trituration of cryst. B_{12} (cyanocobalamin USP) with dicalcium phosphate, 25-kilo dms.	kilo	10.75	12.75
Vitamin B_{12}, 0.1% trituration of cryst. B_{12} (cyanocobalamin USP) with mannitol, 25-kilo. dms.	kilo	15.80	–
Vitamin B_{12}, cobalamin concentrate NF with mannitol. 1,000 mcg. per gram, dms, ...	per gram activity	18.45	–
Vitamin B_{12}, 1% Vitamin B_{12}, USP, absorbed on resin, 5-kilo dms., 500-gram lots, frt. alld.	per gram activity	15.65	–
Vitamin B_{12}, 1% cobalamin concentrate, NF, absorbed on resin, 5-kilo dms., frt. alld.	per gram activity	15.40	–
Vitamin B_{12}, 1% cyanocobalamin in gelatin, 2.5-kilo dms., frt. alld.	per gram activity	15.40	–
Vitamin C (see Ascorbic acid).			
Vitamin D (see Cholecalciferol)			
Vitamin D_2 (see Codliver and Fishliver oils).			
Vitamin E (see a-Tocopherol and Wheat germ oil).			
Vitamin H (see Biotin).			
Violet methyl toner (see Methyl violet toner)			

W

Warfarin 0.5%, dms., ton lots, frt. alld. New York or Chicago	lb.	.75	–
Wheat germ oil, cold-pressed	gal.	16.50	17.50
cold-processed	gal.	14.00	–
White precipitate, USP, powd., 100-lb. dms., f.o.b. works	lb.	7.892	11.24
Whiting (see Calcium carbonate).			
Wintergreen oil, syn. (see Methyl salicylate).			
Witch hazel bark, bls.	lb.	1.35	–
leaves, bls.	lb.	1.76	–
400 mesh, bgs., c.l. works	ton	134.00	–
325 mesh, bgs., c.l. works	ton	117.00	–
high aspect ratio, bgs., works	ton	164.00	–
Wollastonite, t.l., f.o.b., producing plant, general grade	ton	200.00	–
325 mesh	ton	140.00	141.00
400 mesh	ton	160.00	–
1250 mesh	ton	500.00	–
Wool grease, USP (see Lanolin).			
Wormseed oil (see Chenopodium oil, NF)			
Wormwood oil, cns.	lb.	31.00	36.00

X

Xanthan gum, food 300-lb. dms., f.o.b. works	lb.	6.66	6.20
Ind., grade, same basis	lb.	4.54	–
Xylene, petroleum, ind. or nitration, tanks			
Alliance, La., f.o.b.	gal.	.80	–
Atlanta, Ga., divd.	gal.	.80	–
Bayonne, N.J., divd.	gal.	.80	–
Bayonne, N.J. f.o.b.	gal.	.80	–
Baytown, Tex., f.o.b.	gal.	.80	–
Chicago, Ill., divd.	gal.	.80	–
Clairton, Pa.	gal.	.80	–
Ft. Wayne, Ind., divd.	gal.	.80	–
Gulf Coast, spot, barges	gal.	.72	–
Houston, Tex., divd.	gal.	.80	–
New Jersey Metro, divd	gal.	.80	–
Xylene, petroleum, ind. or nitration, tanks			
Philadelphia, Pa., divd.	gal.	1.36	–
Providence, R.I., divd.	gal.	1.42	–
South Bend, Ind., divd.	gal.	1.37	–
m-Xylene, high purity, tanks, f.o.b. Texas City, Tex.	lb.	.36	–
o-Xylene, tanks, works	lb.	.125	.16
p-Xylene, tanks, divd.	lb.	.195	–
m-Xylenediamine, dms., t.l., f.o.b. works	lb.	1.70	–
2,4-Xylidine, tech., liq., c.l., t.l. f.o.b. works	lb.	1.50	–
Xylidines, mixed, o-m-p., dms., c.l., t.l., f.o.b. works	lb.	1.00	–

Y

Yara yara, 25-lb. cns.	lb.	2.81	–
Yeast, pure brewer's debittered, NF, Saccharomyces, t.l., f.o.b. works	lb.	1.10	–
Yerba, santa leaves, bls.	lb.	2.40	–
extra, bots.	lb.	26.50	31.75
Ylang-ylang oil, extra grade	lb.	23.93	–
grade 1	lb.	19.09	–
grade 2	lb.	15.90	–
grade 3	lb.	13.04	–

Z

Zein, bgs., 2,000-lb. lots	lb.	7.50	8.30
Zinc acetate, NF, dms.	lb.	1.00	1.78
tech., dihydrate, bgs., t.l., works	lb.	1.80	–
Zinc borate, tech., 43% ZnO, 37% B_2O_3, 50-lb. bgs., 20,000-lb. t.l., f.o.b. works	lb.	.55	–
cryst., 37% ZnO, 49% B_2O_3, 250-lb. dms. 20,000 lbs. t.l. f.o.b. wks.	lb.	.89	–
Zinc chloride, USP, gran., dms.	kilo	9.79	–
Zinc chloride, tech., soln. 50%, tanks, f.o.b. Cleveland, Ohio	100 lbs.	20.20	–
Concord, N.C.	100 lbs.	20.20	–
Freeport, Tex.	100 lbs.	20.20	–
Old Bridge, N.J.	100 lbs.	20.20	–
65 degree, same basis Cleveland, Ohio	100 lbs.	27.90	–
Concord, N.C.	100 lbs.	27.90	–
Old Bridge, N.J.	100 lbs.	27.90	–
70 degree, same basis Cleveland, Ohio	100 lbs.	29.70	–
Concord, NC	100 lbs.	29.70	–
Old Bridge, NJ	100 lbs.	29.70	–
72 degree, same basis Cleveland, Ohio	100 lbs.	33.20	–
Concord, NC	100 lbs.	33.20	–
Old Bridge, NJ	100 lbs.	33.20	–
Zinc chromate, bgs., divd.	lb.	1.12	–
Zinc cyanide, dms., c.l.	lb.	1.65	2.11
Zinc dust pigment type 1 & 2, dms., c.l., f.o.b. plant	lb.	.59	.67
Zinc ethylenediamine tetracetic acid, 8.4% Zn., ammonia salt soln., t.c., t.l., f.o.b. works	lb.	.66	–
8% Zn., ammonia anti soln., t.c., t.l., f.o.b. works	lb.	.48	–
Zinc fluoborate, liq. conc., dms., t.l., works, frt. equald.	lb.	.66	–
Zinc metal, high grade, divd.	lb.	.44	–
Zinc naphthenate, liq. 8% Zn., dms., divd	lb.	.95	–
Zinc nitrate, tech., flake 300-lb. dms.	lb.	.34	.36
Zinc oxide photo conductive, bgs., c.l., frt. alld.	lb.	.47¾	.56½
Zinc oxide, USP 50-lb. bxs., c.l., frt. alld.	lb.	.46½	.59½
Zinc oxide pigment, American process, lead-free bgs., c.l., frt. alld.	lb.	.40	.49
Zinc oxide pigment, French process regular, bgs., c.l., frt. alld.	lb.	.41	.51
Zinc phenolsulfonate, purif., gran., 250-lb. dms., t.l., frt. alld.	lb.	1.82	–
Zinc pyridinethione, 48% dispersion, dms., f.o.b. works	lb.	6.50	6.80
Industrial grade		14.50	–
Zinc resinate precip. 7.2-7.6% Zn., dms., frt. alld.	lb.	.45	–
Zinc silicofluoride, dms., c.l., t.l., works	lb.	.17	[illegible]
Zinc stearate, USP, bulk, t.l.	lb.	.92	1.46
Zinc sulfate, gran., monohydrate, individual grade 36% Zn., bgs., c.l., works	100 lbs.	26.50	29.00
agricultural grade powd., bulk, same basis	100 lbs.	22.50	–
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	lb.	.42	–
Zinc undecylenate, dms., works	lb.	4.67	4.70
Zinc-formaldehyde sulfoxylate, basic 200-lb. dms., frt. alld.	lb.	1.06	–
Zircon gran. bgs., bulk c.l., works	ton	165.00	177.00
Zircon milled bgs., 200 and 325 mesh, c.l., works	ton	225.00	–
Zirconium acetate soln., 25% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.97	–
22% ZrO_2, same basis	lb.	.78	–
Zirconium hydride, powd., electronic grade, dms., works	lb.	[illegible]	–
Zirconium oxide, powd., coml., dms., 2,000 lbs. min.	lb.	4.25	–
electronic, same basis	lb.	7.25	–
insulating, stabilized, 325°F same basis	lb.	3.87	–
insulating, unstabilized, 325°F same basis	lb.	3.65	–
dense, stabilized, 80F, same basis	lb.	[illegible]	–
Zirconium oxychloride, liq., ctns. 5-ton lots, works	lb.	.91	[illegible]

CHEMICAL IMPORTS

US imports of chemicals and related materials are reported in this section by CPI material. Listings include consignee where possible, container, net weight, name of vessel (in parenthesis), port of origin and date of shipment's arrival in New York or the Port of Newark.

US chemical imports/exports are tabulated monthly in the market reports.

A-B

3 AMINO 1 2 PROPANDIOL Scanfreight 19 dms (5028 lbs) (Atlantic Compass) Gothenburg, 7/7.
3 AMINO 4 METHOXY ACETANILIDE Greenwich Chemical 86 dms (32810 lbs) (Ming Moon) Kobe, 7/23.
4 4 OXYDIANILINE MTC America 100 dms (5071 lbs) (Louis Maersk) Tokyo, 7/24.
5 ACETYL SALICYLAMIDE Leyden Customs Expediters 10 dms (1102 lbs) (Hreljin) Rijeka, 7/18.
ACETAMINOPHEN Order 300 kgs (19180 lbs) (Ging Ha) Shanghai, 7/19.
ACETATE LINALYLE SYNTHETIC Order 158 dms (67226 lbs) (Atlantic Saga) Le Havre, 7/9.
ACETYL ACETONE Wacker Chemicals 10 brl (4541 lbs) (TFL Jefferson) Bremerhaven, 7/21.
ACETYL DIMETHYL ESTER Order 77 csk (37516 lbs) (Nedlloyd Rochester) Rotterdam, 7/15.
ACETYL SALICYLIC ACID M Gurza Custom Brokers 400 dms (24692 lbs) (Louis Maersk) Hong Kong, 7/24.
ACETYLSALICILIC Felton Intl 280 cs (40256 lbs) (Bazias 5) Constanza, 7/28.
ACETYLSALICYLIC ACID Janel Intl Fwdrs 30 bxs (42229 lbs) (Ever Greet) Rotterdam, 7/10.
ACRYLAMIDE Order 2160 bgs (124533 lbs) (Ever Great) Rotterdam, 7/10.
ACRYLIC Livingston Intl Freight 388 ctn (3849 lbs) (Sea Land Leader) Algeciras, 7/22.
ACRYLONITRILE BUTADIENE RUBBER N Albo Fwdg 240 pkg (14208 lbs) (Kiso Maru) Tokyo, 7/15.
ACTIVATED CARBON Carbon & Filtration Products 20 crt (46150 lbs) (Louis Maersk) Singapore, 7/24.
Degussa 800 bgs (28984 lbs) (Stuttgart Express) Bremerhaven, 7/22.
Grant Chemicals 500 bgs (40547 lbs) (Ever Orcot) Felixstowe, 7/10.
Kreha 8 bgs (370 lbs) (Leda Maersk) Tokyo, 7/16.
ADIPIC ACID Wold D Barth 3200 bgs (170695 lbs) (Bazias 5) Constanza, 7/28.
AGAR AGAR Alltransport 20 dms (2425 lbs) (American Ohio) Rotterdam, 8/1.
American Shpg 200 bgs (11552 lbs) (Coplapo) Valparaiso, 7/24.
Tic Gums 40 dms (4782 lbs) (Leda Maersk) Kobe, 7/16.
M D 40 dms (4709 lbs) (Alexandra) Rotterdam, 7/10
ALGINIC ACID Fallek Chemical 20 dms (2425 lbs) (Ming Moon) Yokohama, 7/23.
ALLEPPEY FINGER TURMERIC Order 240 bgs (American Illinois) Singapore, 7/21.
Overseas Produce 180 bgs (22328 lbs) (Vishva Parag) Algeciras, 7/25.
R T French 288 bgs (40190 lbs) (Vishva Parag) Algeciras, 7/25
ALLYL ALCOHOL Rhone Poulenc 75 dms (32002 lbs) (Al Wattyah) Fos, 7/21.
ALPHA METHYL DOPA M G Transport Warehouse 10 dms (639 lbs) (Woensdrecht) Hamburg, 7/25.
ALUMINUM OXIDE Treibacher 1400 bgs (157761 lbs) (Dart Continent) Bremerhaven, 7/22.
ALUMINUM ACETATE BASIC STANDARD Davos Chemical 6 bgs (335 lbs) (Ming Moon) Kobe, 7/23.
ALUMINUM HYDROXIDE M O Transport Warehouse 4 pkg (10847 lbs) (Woensdrecht) Hamburg, 7/25.
ALUMINUM PASTE SCAC Transport 101 dms (45470 lbs) (Heide) Hamburg, 7/25.
ALUMINUM PASTE 1074 U S Bronze Powder 70 dms (45146 lbs) (Alexandra) Antwerp, 7/10.
AMMONIUM BIFLUORIDE Order 880 bgs (40601 lbs) (American Ohio) Bremerhaven, 8/1.
AMMONIUM CHLORIDE Order 400 pkg (40050 lbs) (Atlantic Compass) Liverpool, 7/7.
400 skr (40635 lbs) (Dart Atlantica) Felixstowe, 7/28.
AMMONIUM OXALATE Daniel F Young 38 bgs (2136 lbs) (Atlantic Service) Rotterdam, 7/23.
AMMONIUM PERSULFATE Alltes Intermodal Transport 164 dms (19638 lbs) (Ming Moon) Kaohsiung, 7/23.
AMYRIS OIL Polarome Mfg 8 dms (0 lbs) (San Pedro) Haina, 7/18.
Ungerer 8 dms (2414 lbs) (San Pedro) Haina, 7/18.
ANISE OIL Iber Freight 8 pkg (3886 lbs) (Almudena) Valencia, 7/25.
ANISE SEED E L Scott 327 bgs (39083 lbs) (Almudena) Cadiz, 7/25.
ANNATTO Overseas Produce 21 bgs (3182 lbs) (San Pedro) Haina, 7/18.
ANTIMONY REGULUS Minmetals 66 plt (117287 lbs) (Bing He) Shanghai, 7/18.
ASPARTIC ACID Ajinomoto 40 bxs (71426 lbs) (Ever Greet) Le Havre, 7/10.
BARBITURIC ACID Livingston Intl Freight 120 dms (7786 lbs) (Louis Maersk) Hong Kong, 7/24.
BARIUM CARBONATE Order 400 bgs (22222 lbs) (Kiso Maru) Tokyo, 7/16.
BARIUM CARBONATE PRECIPATED Prescott 3400 bgs (189843 lbs) (Bind He) Kobe, 7/18.
BARIUM CARBONATED Kali Chemie 720 bgs (160636 lbs) (Ever Greet) Hamburg, 7/10.
BARIUM CHLORIDE Cometals 1360 bgs (75857 lbs) (Bing He) Kobe, 7/18.
Order 720 bgs (39842 lbs) (Bing He) Kobe, 7/18.
BARIUM FERRITE Jarrow Products 18 plt (40516 lbs) (Ever Shine) Leghorn, 8/28.
BARIUM HYDROXIDE OCTAHYDRATE Kingsley & Keith 880 bgs (37929 lbs) (Bing He) Kobe, 7/18.
BARIUM NITRATE Cometals 1980 dms (231354 lbs) (Bing He) Kobe, 7/19.
ICD Group 340 dms (40477 lbs) (American Illinois) Hong Kong, 7/21.
BASIL A A Sayla 494 bgs (27227 lbs) (TFL Jefferson) Felixstowe, 7/21.
BEESWAX R Baldini 108 ske (11964 lbs) (Coplapo) Valparaiso, 7/24.
BENZIDINE DISULFONIC ACID Bemo Shpg 10 dms (3316 lbs) (Ming Moon) Kobe, 7/23.
BENZOIC ACID Felton Intl 400 bgs (22487 lbs) (Bazias 5) Constanza, 7/28.
BENZOYL CHLORIDE Marlborough Chemicals 2 tnk (85582 lbs) (Atlantic Conveyor) Liverpool, 7/21.
BENZOYL PEROXIDE NON HAZARDOUS Agrichem 168 dms (16061 lbs) (Dart Atlantica) Felixstowe, 7/29.
BENZYL ALCOHOL Leschaco 1 tnk (40432 lbs) (Alexandra) Bremen, 7/18.
Marlborough Chemicals 1 tnk (40344 lbs) (Ever Great) Felixstowe, 7/10.
BETA HYDROXYNAPHTHOIC ACID Ueno Fine Chemical Ind 2930 bgs (144137 lbs) (Ming Moon) Kobe, 7/23.
BETA NAPHTHOL Penson 660 bgs (37853 lbs) (Ming Moon) Hong Kong, 7/23.
BETA NAPHTOL FLAKES Order 1120 ctn (63457 lbs) (Bazias 5) Constanza, 7/28.
BLACK PEPPER Harris Freeman 288 bgs (45082 lbs) (American Illinois) Singapore, 7/21.
Ludwig Mueller 201 bgs (33089 lbs) (Ever Linking) Singapore, 7/20.
Man Producten 210 bgs (33069 lbs) (Ever Linking) Singapore, 7/20.
BLUE POPPY SEED Louis Furth 720 bgs (36840 lbs) (Columbus Virginia) Melbourne, 7/25.
BORIC ACID Enichem Americas 364 pkg (130805 lbs) (Sea Land Leader) Algeciras, 7/22.
BRAZILIAN NATURAL MENTHOL CRYSTA Sarcom 100 dms (10972 lbs) (Bacol Vitoria) Santos, 7/11.
BUTYL METHACRYLATE Surface Air Intl 1 tnk (40344 lbs) (Ever Living) Felixstowe, 7/21.

C-D

CADMIUM PIGMENT Elco Shpg 7 dms (0 lbs) (Alexandra) Felixstowe, 7/10.
Whittaker Clark & Daniels 15 dms (928 lbs) (Dart Continent) Felixstowe, 7/22.
CADMIUM PIGMENTS Davies Turner 110 dms (12981 lbs) (Atlantic Compass) Liverpool, 7/7.
Whittaker Clark & Daniels 12 dms (741 lbs) (Atlantic Compass) Liverpool, 7/7
CAFFEINE ANHYDROUS Daniel F Young 120 dms (8015 lbs) (Alexandra) Rotterdam, 7/18.
CALCINED CLAY MOLOCHITE Hamill & Gillespie 384 sks (43033 lbs) (Ever Draco) Felixstowe, 7/10.
384 skrt (43633 lbs) (Ever Living) Felixstowe, 7/21.
CALCIUM ALGINATE PROTAWELD TX Scanfreight 1 plt (2273 lbs) (Atlantic Compass) Gothenburg, 7/7.
CALCIUM CARBONATE Whittaker Clark & Daniels 355 bgs (40234 lbs) (Atlantic Compass) Liverpool, 7/7.
CAPRIC ACID Rohaco Chemicals 1 con (38272 lbs) (Ever Greet) Rotterdam, 7/10.
CAPSICUM OLEORESIN Meer 57 ctn (2388 lbs) (Vishva Parag) Algeciras, 7/25.
CARDAMOM William E. Martin 44 bgs (2266 lbs) (Polwind) Sto Tomas, 7/25.
CARDAMON OIL Intl Flavors & Fragrances 1 cs (135 lbs) (San Pedro) Haina, 7/18.
CARDAMOMS A A Sayla 20 bgs (2249 lbs) (Schackenborg) Pt Limon, 7/17.
Zaki Azmi Abdoan Trdg 250 bxs (24802 lbs) (Schackenburg) Sto Tomas, 7/17.
CARNAUBA WAX Strahl & Pitsch 800 bgs (44370 lbs) (San Martin I) Fortaleza, 7/16.
Frank B Ross 440 bgs (44404 lbs) (Lloyd Atlantico) Fortaleza, 7/10.
CARNAUBA WAX FLAKES FATTY Frank B Ross 440 bgs (44404 lbs) (Lloyd Atlantic) Fortaleza, 7/18.
Strahl & Pitsch 800 bgs (44974 lbs) (Netuno) Fortaleza, 7/9.
CARNAUBA WAX PRIME YELLOW Michelman 400 bgs (40485 lbs) (Netuno) Fortaleza, 7/9.
CARRAGEENAN Harold Pepper 100 dms (11023 lbs) (Leda Maersk) Kobe, 7/18.
CASEIN Noraeland Foods 1560 bgs (65980 lbs) (Sea Land Voyager) Bremerhaven, 7/24.
CASSIA Ludwig Mueller 334 bgs (44092 lbs) (American Illinois) Singapore, 7/81.
CASTOR OIL Order of Shipper 2 bks (6377480 lbs) (Stolt Span) Salvador, 7/26.
2 bks (4288009 lbs) (Stolt Span) Santos, 7/25.
CAUSTIC SODA Commodity Chemical 2 bks (15426851 lbs) (Bow Hunter) Rotterdam, 7/31.
CAUSTIC SODA MINIPEARL Browning Chemical 720 bgs (40609 lbs) (Ever Greet) Rotterdam, 7/10.
CAUSTIC SODA PEARLS Brenntag Interchem 758 bgs (38065 lbs) (Heide) Rotterdam, 7/26.
Thorson Chemical 758 bgs (38082 lbs) (Ever Greet) Antwerp, 7/10.
CECEMEL Venguard Resources 158 bxs (4206 lbs) (Stuttgart Express) Rotterdam, 7/22.
CELERY SEEDS Schill Food Products 187 bgs (22090 lbs) (Al Wattyah) Dubai, 7/21.
CELUKAVIT B M & T Chemicals 900 bgs (41270 lbs) (Ever Living) Antwerp, 7/21.
CENTRIFUGED GREY CARNAUBA WAX Robert S Baldini 800 bgs (44874 lbs) (San Martin I) Fortaleza, 7/16.
CERIDUST 9615 A Order 72 bgs (4034 lbs) (Stuttgart Express) Bremerhaven, 7/22.
CHAPARRAL LEAVES V A Cordovi 67 bgs (2659 lbs) (Polwind) Vera Cruz, 7/25.
CHILLIES Oesenhouwer 2500 bgs (38898 lbs) (Al Wattyah) Jebel Ali, 7/81.
CHILLIES STEMLESS Intl Brokers 1500 bgs (63996 lbs) (Al Wattyah) Jebel Ali, 7/21.
Otto Gerdau 1500 bgs (63998 lbs) (Al Wattyah) Jebel Ali, 7/21.
CHILLY POWDER Rhee Brothers 850 ctn (16199 lbs) (Louis Maersk) Hong Kong, 7/24.
CHINA CLAY GROLLEG LUMP Anglo American Clays 80 bbg (90521 lbs) (Ever Living) Felixstowe, 7/21.
CHINESE CEDARWOOD OIL Mdsi 127 dms (50397 lbs) (Ever Linking) Hong Kong, 7/20.
CHINESE MENTHOL CRYSTALS Hudson Shpg 168 dms (1616 lbs) (Alexandra) Bremen, 7/18.
CHINESE NATURAL HERBS Winter Glove MFG & Trdg 62 ctn (6328 lbs) (Leda Maersk) Hong Kong, 7/18.
CHINESE PATENT MEDICINE Wing Tai Hong 71 ctn (1747 lbs) (Bing He) Kobe, 7/19.
CHLORANIL DRY Order 30 hob (10562 lbs) (Nedlloyd Rouen) Rotterdam, 7/22.
CHLORINE DRY BLEACH SODIUM DICHL Olin 286 dms (88157 lbs) (Alexandra) Felixstowe, 7/18.
CHLORURE D EHTYLE HEXANOYLE Snpe 40 dms (17725 lbs) (Dragor Maersk) Marseille, 7/18.
CHOLINE BITARTRATE Samrak Chemical 120 dms (14339 lbs) (Nedlloyd Rochester) Rotterdam, 7/15.
CIMETIDINE MG Transport Warehouse 36 dms (2167 lbs) (Woensdrecht) Hamburg, 7/25.
CINNAMON GUILLS Khl Flavors 135 mix (14823 lbs) (Al Wattyah) Jebel Ali, 7/21.
CITRIC ACID Omnitrans 1870 bgs (159593 lbs) (Ever Great) Hamburg, 7/10.
CITRIC ACID ANHYDROUS Order 1584 bgs (162984 lbs) (Ever Great) Antwerp, 7/10.
800 bgs (45415 lbs) (Ever Living) Antwerp, 7/21.
CITRIC ACID ANHYDROUS FINE GRANU Order 1600 bgs (90830 lbs) (Ever Great) Antwerp, 7/10.
CITRO NOVA ORANGE Firmenich 19 dms (7811 lbs) (San Martin I) Santos, 7/16.
CITRUS OILS Baromatic 11 dms (3137 lbs) (Zim Montreal) Haifa, 7/20.
CLAY Bermuda Ocean Shpg Service 40 bgs (2297 lbs) (Atlantic Conveyor) Liverpool, 7/21.
CLAY GRAPHITE CRUCIBLES HOISTS E Nollins Crucible Refractories 1 con (44092 lbs) (Heide) Hamburg, 7/25.
CLOVE LEAF OIL Cham Fleur 75 dms (38536 lbs) (Ever Unking) Singapore, 7/20.
Order 160 dms (78036 lbs) (Ever Unking) Singapore, 7/20.
CLOVES East West Intl 200 bgs (22399 lbs) (San Martin I) Santos, 7/18.
COALTAR 5 DYE INTERM MALONONTRIL Lonza 28 dms (14385 lbs) (Stuttgart Express) Bremerhaven, 7/22.
COALTAR DYES Basf Imports 44 plt (39674 lbs) (Almudena) Leghorn, 7/25.
COALTAR INTERMEDIATE Montedison 180 dms (21784 lbs) (Zim Genova) Barcelona, 7/8.
COBALT Order 380 dms (209940 lbs) (Dart Atlantica) Antwerp, 7/29.
COBALT NICKEL ALLOY Parkans Intl 12 dms (1257 lbs) (Dart Continent) Felixstowe, 7/22.
COD LIVER OIL La Prefarida 800 ctn (33444 lbs) (Heide) Rotterdam, 7/25.
COD LIVER OIL & MALT La Prelerida 60 ctn (2083 lbs) (Heide) Rotterdam, 7/25.
COLLAGEN STERILE SOLUTION Natural Nydegger Transports 5 ctn (0 lbs) (Atlantic Star) Le Havre, 7/16.
COPPER PHTHALOCYANINE BLUE CRUDE Nagase America 100 bgs (5401 lbs) (Ming Moon) Kobe, 7/23.
CORIANDER Sadamco Imports & Exports 210 bgs (23148 lbs) (Argonaut) Izmir, 7/28.
CORIANDER SEEDS Agent 400 bgs (35274 lbs) (Zim Genova) Haifa, 7/8.
CUPROUS THIOCYANAT Pluess Stauffer 600 pkg (34392 lbs) (Ever Great) Felixstowe, 7/10.
CYANINE BLUE CRUDE Leyden Customs Expediters 800 bgs (43078 lbs) (Ming Moon) Kobe, 7/23.
CYANOACETAMIDE Davos Chemical 2 dms (476 lbs) (Ming Moon) Kobe, 7/23.
CYANOACRYLATE ADHESIVES Kuehne & Nagel 392 ctn (11962 lbs) (Oriental Minister) Yokohama, 7/22.
CYANURIC CHLORIDE Degussa 360 dms (88509 lbs) (Stuttgart Express) Antwerp, 7/22
CYGRO PREMIX Order 2 plt (2337 lbs) (Zim Montreal) Barcelona, 7/20.
D ACID NAPHTHYLAMINE DISULFONIC Bemo Shpg 35 dms (10648 lbs) (Ming Moon) Kobe, 7/23.
D L PHENYLPROPANOLAMINE Mitrans 114 dms (13949 lbs) (Oriental Minister) Kobe, 7/22.
DEADBURNT MAGNESITE Order 1 bks (11028100 lbs) (Julie) Yerakini, 7/24.
DECORTICATED CARDAMOMS William E Martin & Sons 30 bgs (3373 lbs) (Schackenborg) Sto Tomas, 7/17.
DEWHISKERED DILL SEED MINCINO TRDG 200 bgs (26455 lbs) (Al Wattyah) Dubai, 7/21.
DEXTRINE Order 4200 bgs (233800 lbs) (Sea Land Voyager) Rotterdam, 7/24.
DEXTRINE STARCH Order 800 bgs (44533 lbs) (Ever Living) Rotterdam, 7/21.
DEXTROSE Order 800 bgs (44533 lbs) (Ever Greet) Rotterdam, 7/10.
DIACETON ACRYLAMIDE Kyowa Hakko 150 dms (15212 lbs) (Louis Maersk) Kobe, 7/24.
DIAMINODIPHENYLAMINE SULFONIC ACID Bemo Shpg 40 dms (1270 lbs) (Ming Moon) Kobe, 7/23.
DIBASIC LEAD PHOSPHITE Monson Chemicals 342 dms (41753 lbs) (Ever Greet) Rotterdam, 7/10.
DICHLORALPHENAZONE Ganes Chemicals 7 dms (772 lbs) (Atlantic Compass) Gothenburg, 7/7.
DICHLOROANTHRAQUINONE Leyden Customs Expediters 80 dms (13693 lbs) (Al Wattyah) Jebel Ali, 7/21.
DICHLOROBENZIDINE DIHYDROCHLORIDE Mitsui 80 dms (24081 lbs) (Ming Moon) Kobe, 7/23.
DICHLORODIFLUOROMETHANE John Stear 1 tnk (38140 lbs) (Ever Living) Felixstowe, 7/21.
DICYANDIAMIDE C Order 800 bgs (89595 lbs) (Heide) Rotterdam, 7/25.
DIETHYL MALONATE Felton Intl 417 cs (56792 lbs) (Bazias 5) Constanza, 7/28.
DIETHYL OXALATE Rhone Poulenc 72 dms (34603 lbs) (Dragor Maersk) Marseille, 7/18.
DIETHYLCARBAMAZINE CITRATE Max Gruenhut 24 dms (2868 lbs) (Nedlloyd Rochester) Rotterdam, 7/15.
DIETHYLENETRIAMINE Berol Chemicals 48 dms (21693 lbs) (Atlantic Compass) Gothenburg, 7/7.
DIETHYLENETRIANAMINE Tralpak 1 tnk (41667 lbs) (Alexandra) Rotterdam, 7/18.
DIETHYLETHANOLAMINE Order 3 tnk (120217 lbs) (Nedlloyd Rochester) Bremerhaven, 7/15.
DIHYDROSTREPTOMYCINE Rhone Poulenc 116 ctn (4248 lbs) (Atlantic Service) Le Havre, 7/23.
DIHYDROTHIOTOLUIDINE SULFO SAEUR Order 125 csk (37439 lbs) (Ever Greet) Hamburg, 7/10.
DIMETHYLAMINOPROPYLAMIN Order 2 tnk (79542 lbs) (Heide) Rotterdam, 7/25.
DIMETHYLETHYLAMINE Order 124 dms (42509 lbs) (Ever Superb) Fos, 7/19.
DIMETHYLSULFOXIDE Order 75 dms (38536 lbs) (Ever Superb) Fos, 7/18.
DIPENTAERYTHRITOL Sumitrans 640 bgs (28783 lbs) (Ever Linking) Tokyo, 7/20.
DIPHENHYDRAMINE HCL USP XXI Leading Fwdrs 20 pkg (2468 lbs) (Kiso Maru) Kobe, 7/16.
DIPHENYL OXIDE Intl Flavor & Fragrances 12 dms (5900 lbs) (Bing He) Shanghai, 7/19.

E-G

ETHYL ACETATE Rekortan Sports 7 brl (3087 lbs) (Ever Living) Antwerp, 7/21.
ETHYL ALCOHOL H&M General Trucking 25 ctn (1100 lbs) (Atlantic Compass) Liverpool, 7/7.
ETHYL ALPHA CHLOROPROPIONATE Rhone Poulenc 158 dms (80116 lbs) (Nedlloyd Express) Marseille, 7/22.
ETHYL BROMOACETATE Ameribrom 27 dms (5655 lbs) (Argonaut) Haifa, 7/28.
ETHYL ORTHOFORMATE Rhone Poulenc 30 dms (13042 lbs) (Nedlloyd Express) Marseille, 7/22.
ETHYL VANILLIN FOL Vanilla Flavour 20 kgs (2381 lbs) (Dart Continent) Felixstowe, 7/22.
ETHYLENE GLYCOL Order of Shipper 1 bks (9297968 lbs) (Stolt Span) Aratu, 7/26.
1 bks (1041623 lbs) (Stolt Span) Santos, 7/26.
EUCALYPTOL Klockner Chemical 40 dms (17967 lbs) (Coplapo) Valparaiso, 7/24.
EUCALYPTUS OIL & MUSK KETONE Order 130 dms (25326 lbs) (Bing He) Kobe, 7/19.
EUGENOL Order 15 dms (6814 lbs) (American Illinois) Singapore, 7/21.
FATTY ACID NON HAZARDOUS Morris Friedman 1 tnk (41050 lbs) (Nedlloyd Rochester) Rotterdam, 7/15.
FATTY ALCOHOL Amato Agency 520 bgs (31552 lbs) (Nedlloyd Rochester) Bremerhaven, 7/15.
FATTY ALCOHOL HO OCENOL Henkel 2 tnk (79542 lbs) (Alexandra) Rotterdam, 7/18.
FENNEL Sedamco Imports & Exports 100 bgs (11023 lbs) (Argonaut) Izmir, 7/28.
FENNEL SEEDS Agent 500 bgs (110230 lbs) (Zim Genova) Haifa, 7/8.
Griffith Laboratories 167 bgs (24323 lbs) (Al Wattyah) Dubai, 7/21.
McCormick 220 bgs (24295 lbs) (Al Wattyah) Dubai, 7/21.
Spice Mill 1000 bgs (110230 lbs) (Zim Genova) Haifa, 7/8.
FENUGREEK Sedamco Imports & Exports 200 bgs (22048 lbs) (Argonaut) Izmir, 7/28.
2590 ctn (58518 lbs) (Dart Atlantica) Felixstowe, 7/29.
FERRIC AMMONIUM EDTA Surface Air Intl 2 tnk (62276 lbs) (Ever Living) Antwerp, 7/21.
FERRIC CHLORIDE HHI 30 dms (6918 lbs) (Dart Continent) Antwerp, 7/22.
FERRIC CHLORIDE PURIFIED & HEXAH Trans World 180 dms (42481 lbs) (Ever Greet) Hamburg, 7/10.
FERRO SILICIUM Foseco 279 pkg (42549 lbs) (Dragor Maersk) Marseille, 7/1.
FISH OIL Order 20 con (43672 lbs) (Heide) Rotterdam, 7/25.
Scanfreight 4 dms (1634 lbs) (Atlantic Compass) Gothenburg, 7/7.
FLUOROANILINE Olin 104 dms (5512 lbs) (Dart Continent) Felixstowe, 7/22.
FLUOROBORIC ACID Hoyer 1 tnk (39242 lbs) (Atlantic Star) Bremerhaven, 7/16.
FLUOROCARBON POLYMER Nichimen 176 dms (21014 lbs) (Leda Maersk) Kobe, 7/18.
Schenkers Intl Fwdrs 71 bdl (8347 lbs) (Kiso Maru) Tokyo, 7/15.
FLUOROCARBON POLYMERS Viking Sea Freight 64 dms (7381 lbs) (Kiso Maru) Tokyo, 7/15.
FUMARIC ACID J M Rodgers 700 bgs (39251 lbs) (Al Wattyah) Genoa, 7/21.
FUNGICIDES Ciba Geigy 756 pkg (43254 lbs) (Atlantic Service) LeHavre, 7/23.
Rohm & Haas 116 dms (27315 lbs) (Sea Land Voyager) Rotterdam, 7/24.
FUNGICIDES NOT DANGEROUS Ciba Geigy 756 pkg (43254 lbs) (Atlantic Star) LeHavre, 7/16.
D SALT MOIST MW 304 Ciba Geigy 72 dms (21111 lbs) (Stuttgart Express) Hamburg, 7/22.
DARUC Serge Brierre Exports & Impo 1450 cs (35164 lbs) (Sea Land Leader) Algeciras, 7/22.
Serge Brierre Exports & Impo 2900 pkg (70327 lbs) (Sea Land Leader) Algeciras, 7/22.
GARLIC GRANULES China United Trdg 520 ctn (31526 lbs) (American Illinois) Hong Kong, 7/21.
GELATIN Croda 182 dms (34764 lbs) (Atlantic Compass) Liverpool, 7/7.
Trans Marine Systems 84 dms (15291 lbs) (Atlantic Conveyor) Liverpool, 7/21.
Corbett Intl 400 dms (93916 lbs) (Ever Superb) Fos, 7/16.
800 bgs (41103 lbs) (Nedlloyd Express) Marseille, 7/22.
Croda Gelatin 80 dms (8560 lbs) (Stuttgart Express) Greenock, 7/22.
GELATINE EDIBLE Davis Gelatine 800 bgs (40565 lbs) (American Lancer) Buenos Aires, 7/17.
GINGER K I Utser 60 bgs (11164 lbs) (American Illinois) Singapore, 7/21.
GINGER OIL Polarome Mfg 5D ctn (2548 lbs) (American Illinois) Singapore, 7/21.
GLYCERINE Scallop 1 bks (657310 lbs) (Golar Petrosea) Rotterdam, 7/22.
GLYCINE Order 150 dms (82077 lbs) (Leda Maersk) Tokyo, 7/16.
GRAPHITE Asbury Graphite Mills 4760 bgs (228021 lbs) (Bing He) Kobe, 7/19.
Lonza 858 bgs (36898 lbs) (Stuttgart Express) Bremerhaven, 7/22.
Order 26 mix (36736 lbs) (Hreljin) Marseille, 7/18.
36 pkg (36847 lbs) (Hreljin) Marseille, 7/18.
GRAPHITE ELECTRODES Order 1 con (40860 lbs) (Hreljin) Marseille, 7/18.
GRAPHITE POWDER Marubeni America 50 bbg (90234 lbs) (Heide) Hamburg, 7/25.
GREEN CARDAMOMS Dahiyat Al Kuwait Trdg 250 ctn (25207 lbs) (Schackenborg) Pt Limon, 7/17.
GUAR GUM Celanese 720 bgs (40000 lbs) (Al Wattyah) Dubai, 7/21.
Polypro Intl 765 bgs (42657 lbs) (Al Wattyah) Jebel Ali, 7/21.
Precem Gums 800 bgs (40565 lbs) (TFL Jefferson) Felixstowe, 7/21.
SAE Pellet 1760 bgs (89502 lbs) (Vishva Parag) Algeciras, 7/25.
GUM ARABIC F H Taussig 50 bgs (11243 lbs) (Dragor Maersk) Marseille, 7/16.
GUM ROSIN WW A J Elliott 400 bgs (44753 lbs) (American Ohio) Rotterdam, 8/1.
SAP Atlantic 392 dms (166306 lbs) (Netuno) Paranagua, 7/9.

H-J

H ACID MONOSODIUM SALT Nehls & O'Conner 560 bgs (30769 lbs) (Ming Moon) Yokohama, 7/23.
HELIOTROPINE Ungerer 20 csk (2359 lbs) (Netuno) Santos, 7/9.
HERBS CASCARA Order of Shipper 42 bgs (3146 lbs) (Polwind) Vera Cruz, 7/25.
HEXAMETHYLDISILOXANE TOLUENE Dow Corning 2 ctn (49 lbs) (Atlantic Conveyor) Liverpool, 7/21.
HEXANE POLYMER GRADE Ashland Chemical 1 bks (611340 lbs) (Golar Petrosea) Rotterdam, 7/22.
HIDE GLUE T D Downing 360 bgs (39842 lbs) (San Martin I) Santos, 7/16.
HYDROFLUORIC ACID J M Rodgers 72 dms (36889 lbs) (Ming Moon) Kobe, 7/23.
Trans World Shpg 72 dms (36889 lbs) (Ming Moon) Kobe, 7/23.
HYDROGENATED CASTOR OIL Order of Shipper 3000 bgs (153076 lbs) (Netuno) Santos, 7/9.
HYDROQUINONE PHOTO GRADE Mitsui 720 bgs (41023 lbs) (Oriental Minister) Kobe, 7/22.
HYDROXIDE MONOHYDRATE Kali Chemie 720 bgs (40678 lbs) (Export Freedom) Leghorn, 7/16.
HYDROXYETHYLPIPERAZINE Berol Chemicals 30 dms (14550 lbs) (Atlantic Compass) Gothenburg, 7/7.

CENTRIFUGES
P5400 Sharples, 316 S/S RECONDITIONED
P3400 Sharples, 316 S/S, (5)
P3400 Sharples, 316 S/S, carbide tiles
P3000 Sharples, 316 S/S, RECONDITIONED
P660 Sharples, 316 S/S (2)
40"x 80" Bird, 304 S/S, reconditioned by mfr.
6" Bird OSS, 316 S/S
NX314 DeLevel, 316 S/S
48" Sharples "Tornadomatic" 316 S/S (2)
48" Tolhurst, "Batch Master", S/S (2)
48" Sharples "Sludga-Pak" Model SP-8500, 316 S/S
48" Western States, "Sludga-A-Tron", 316 S/S, (3)
32" Baker-Perkins, pusher design, 316 S/S
26" AT&M suspended centrifuge, 304 S/S 5 H.P.
12" Krauss-Maffei, pusher designed, 316 S/S
6" Baker Perkins Pusher Design, 316 S/S
SB800 Alfa-Level pusher design, 316 S/S

SZEGVARI ATTRITORS
60 gal. Szegvari, jacketed, stainless steel
15 gal. Szegvari, jacketed, stainless steel

PRESSURE FILTERS
460 sq. ft. Durco-Enzinger, Model 80DHC469, 316SS
370 sq. ft. Niagara Model 370-346, 304SS
322.6 sq. ft. Funda Model R-30, 316 S/S, jktd., 40 HP
314 sq. ft. Niagara, Model 42-310-22, 304 S/S
259 sq. ft. Pronto, Model 3259, S/S (2)
160 sq. ft. Sparkler, Model 33S30, S/S (2)
107 sq. ft. Sparkler, Model 33S19, Nickle

VACUUM FILTERS
8'x16' Ametek, 316 ELC S/S LIKE NEW CONDITION
6'x6' Ametek, polypropylene
5'x7' Pexman, 316 S/S, precoat
16"x12" Elmco, 316 S/S, precoat

REACTORS-TANKS
S/S, G/L Reactors, up to 5000 gal. capacity,
Tanks up to 15,000 gal. capacity (100's in stock)
(S/S, G/L, C/S, FRP)

HORIZONTAL BELT FILTERS
6'x16' Elmco, rubber belt, vacuum (2)
4'x12' Elmco, rubber belt, vacuum (2)
2'x10' Straightline, rubber belt, complete
2'x7' Straightline, rubber belt, complete
1'x3' Elmco, rubber belt, complete

BELT FLAKERS
60"x60' Sandvick, S/S belt, with cooling delumper, all accessories. NEW CONDITION
30"x20' Sandvik, S/S belt flaker, complete

FITZ CHILSONATOR
Size 16 x 30 Fitzpatrick Chilsonator System, all S/S construction, with size 30 granulator, with drives

BALL/PEBBLE MILLS
5'x8' Patterson Jacketed Steel Ball Mill, 50 H.P.
5'x8' Patterson Jacketed Steel Ball Mill, 30 H.P.
3'x4' Patterson Pebble Mill, silicia lined

SAND MILLS
12-30 Morehouse-Cowles Sand Mill, 50 H.P.
10-26 Morehouse-Cowles Sand Mills, 25 H.P. (2)
16-P Chicago Boiler "Red Head" 30 H.P.
3-P Chicago Boiler "Red Head," 7½ H.P.
Lab Chicago Boiler "Red Head," 1 H.P.

LAB 3 ROLL MILLS
6"x12" J.H. Day, high speed, complete
4½"x10" Ross, high speed, complete
4"x8" Kent, high speed, complete

ALL NICKLE CONSTRUCTION
500 gal. Nooter Reactors, 30/50 PSI (2)
500 sq. ft. U.S. Autojet Pressure Filter
107 sq. ft. Sparkler Pressure Filter, Model 33-8-19
5'x3' Ametek Rotary Vacuum Filter

JUST PURCHASED
7500 gal. Terre Haute Fermenters, 304 S/S, 50 psi (5)
4000 gal. horizontal batch still, S/S
2500 gal. Hicks tanks, 316L S/S, 50 psi or F/V
2000 gal. Nooter reactors, 316L S/S, 60/90 psi (8)
2000 gal. Pfaudler reactor, 316L S/S, 60/90 psi
2000 gal. Mueller reactor, 316L S/S, 80/90 psi
2000 gal. horizontal batch still, S/S (2)
1250 gal. S/S Mix Tanks, 10 HP Vari-Drive (2)
Misc. G/L tanks and kettles, to 3000 gal. (8)
ST 100 Aeromatic Fluid Bed Dryer, all S/S

MAJOR NEW PURCHASE
(84) NASH CL (WATER SEAL) VACUUM PUMPS
60 Model CL 700 Pumps, 700 CFM to 3" Hg. Abs. [illegible] HP Direct Coupled Drive, mounted on base
18 Model CL 702 Pumps, 700 CFM to 6" Hg. Abs. [illegible]
2 Model CL 2002 Pumps, 2000 CFM, to 6" Hg.
Also available (11) Model H-6, (1) Model H-4, (1) Model L-7 complete with drives
ALL PUMPS IN [illegible] CONDITION

RESIN MFG. EQUIPMENT– OHIO LOCATION
5000 gal. Struthers-Wells Reactor System, 347 S/S, 50 PSI or full vacuum internal, 75 PSI jacketed, 700°F, turbine agitator, with condenser, receiver, piping, controls
15,000 gal. Stainless Steel Tanks, vertical, with internal coils, top entering 30 H.P. turbine agitators (3)
200 gal. Baker-Perkins Mixers, size 17GIM, type 304 stainless steel construction, fully jacketed, duplex dispersion blades, screw tilt, 40 H.P. (5)
35 gal. Patterson "Kneadermaster" Mixers, 304 stainless steel, sigma blades, jacketed, 40 H.P. (5)
100 H.P. Sprout-Waldron Hammermills, Model CG-28 (5)
26" dia. Reitz Thermascrews, 304 S/S, jacketed trough 28' long, 15 H.P. varidrive (2)
40"x64" Patterson Screens, 1 deck, S/S (9)
IMMEDIATE AVAILABILITY–CALL FOR DETAIL!

NEW LIQUIDATION
PVC Suspension Plant — Ohio Location
12–5,000 gal. Pfaudler Reactors, C/S construction, rated 220 PSI internal, 60 PSI jacket, 50/25 H.P. Philadelphia Gear Drive
Complete Nara Vertical Fluid Bed Dryer System, all S/S, 8'7" x 22'1", 2 stage, rated up to 10,000 #/hr., with heaters, blowers, cyclones
Complete Proctor Vertical Flash Dryer System, all S/S, 3'1" x 117'2", with heater, blower cyclones
20,000 gal. Stainless Steel Mix Tanks, 13'6"x19', 20 H.P. (2)
16,000 gal. Stainless Steel Mix Tank, 12'x16'4", 10 H.P. (1)
15,000 gal. Stainless Steel Mix Tank, 9'6"x27'8" 40 H.P. (1)
6,500 gal. Stainless Steel Tank, 9'6"x15'2" (1)
6,000 gal. Glascote Vacuum Receiver, Glass-Lined (1)
7,000 gal. Stainless Steel Mix Tanks, 13'x8"x6', 7½ H.P. (2)
6,500 gal. Glascote Vacuum Receiver, Glass-Lined (1)
2,250 gal. Stainless Steel Kettles, 8'6"x6', jacketed, 10 H.P. (1)
2,250 gal. Stainless Steel Kettles, 6'8"x 8', jacketed, 3 H.P. (2)
2,000 gal. Stainless Steel Mix Tanks, 6'x6'4", 2 H.P. (3)
1,000 gal. Stainless Steel Kettles, 5'4"x6', jacketed, 2 H.P. (2)
1,000 gal. Stainless Steel Jacketed Tanks, 5'4"x6' (2)
4–A.O. Smith Silos, Glass-Lined, 14'x40', bolted
1–Butler, Epoxy-Lined, 9'x32' welded
220 CFM Sullaire Compressor, 125 PSI, rotary screw design
117 sq. ft. Mikro Pulsair Collector, Model 25S-6-30, S/S
Derrick Screen, single deck, 3'x5'
Misc. tanks, feeders, blowers, cyclones, pumps

REACTORS
5000 gal. Struthers-Wells, 347 S/S, 50#/75#
2500 gal. Cryochem, 316 S/S, 75#/75#, with coil
1600 gal. Perry Products, 316 S/S, 75#/150#
750 gal. Pfaudler, Glass-Lined, 100#/90#
200 gal. Pfaudler, 316 S/S, 56#/60# UNUSED
200 gal. Pfaudler, Glass-Lined, 100#/75#
80 gal. Pfaudler, Glass-Lined, 25#/90# complete system
30 gal. Pfaudler, 316 S/S, 60#/90# UNUSED
30 gal. Pfaudler, Glass-Lined, 25#/90#
10 gal. Pfaudler, Glass-Lined, 150#/65#
8 gal. Pfaudler, 316 S/S, 50#/80#

S/S PULVERIZERS
80 ACM Mikro Mill, 75 H.P.
PC-36 Strong-Scott Pulvecon, 180 H.P.
FASO-20 Fitzpatrick "Fitzmill", 7½ H.P. (2)
D-6 Fitzpatrick "Fitzmill", 7½ H.P. (2)
18H Mikro Pulverizer, 8 H.P.
Manesty "Rotogran" Oscillating Granulator

SPECIAL OFFERING
33' dia. Niro Spray Dryers, 316 S/S, UNUSED (2) complete spray drying facility, never installed, including (2) 33' dia. chamber, Model F-350 centrifugal atomizers. All equipment new 1978, as shipped from Niro awaiting installation.

10' dia Niro Fluid Bed Dryer, 304 S/S, UNUSED, complete system with drying chamber, heating-cooling systems, feed tanks, cyclone collectors, all piping.

VACUUM DRYERS
375 cu. ft. Stehning, Double Cone, S/S (9)
175 cu. ft. Venuleth, Double Cone, S/S (3)
80 cu. ft. DeDietrich, Double Cone glass lined
50 cu. ft. F.J. Stokes Double Cone, 304 S/S
40 cu. ft. F.J. Stokes, Rotary, Vacuum, 30"x8', S/S
21 cu. ft. Balfour, Double Cone, glas lined
20"x10' Zimmer dble. screw Holoflites, S/S jktd., vac. (3)

MIXERS
200 gal. B-P, C/S, sigma, jacketed, vac., 75 H.P. (3)
75 liter Papenmeir Mixer, S/S, jacketed, 30 H.P. varidrive
8 cu. ft. Kelley Duplex, paddle, S/S, NEW
3.5 cu. ft. J.H. Day, Nauta, S/S

DISPERSERS
25 H.P. Shar, XP, variable speed
15 H.P. Meyers, XP, variable speed

FARREL LAB 2 ROLL MILLS
8"x16" Farrel Lab Mill, electrically heated, variable speed, variable friction
8"x13" Farrell Lab Mill, 10 HP drive
3"x7" Farrell Lab Mill, oil heated, variable speed

LITTLEFORD MIXERS
FKM 8000 D, 189 cu. ft., carbon steel, 4 choppers
FKM 8000 D, 189 cu. ft., carbon steel
KM 4200 D, 86 cu. ft., jacketed, stainless steel
FKM 3000 D, 65 cu. ft., jacketed, stainless steel
KM 2000 D, 43 cu. ft., jacketed, stainless steel
M 20 E, .42 cu. ft., jacketed stainless steel

S/S RIBBON BLENDERS
2–215 cu. ft. Cleveland Mixer, double ribbon, 25 H.P.
1–150 cu. ft. Reedco, double ribbon, 40 H.P.
1–36 cu. ft. J.H. Day, double ribbon, 10 H.P.

ROSS PLANETARY MIXERS
40 gal. Ross, HDM-40, S/S, jacketed, vacuum, 10 H.P. varidrive (2)
25 gal. Ross, HDM-25, S/S, 15 H.P. varidrive
2 gal. Ross, 130-ELS, S/S, jacketed, vacuum, ¾ H.P. varidrives

ARTISAN EVAPORATORS
50 sq. ft. Artisan "Roto-therm" Evaporators, all S/S construction, F/V internal, 150 PSI jacket (2)
1 sq. ft. Artisan "Rototherm" Lab System, all S/S

COMPACTING PRESSES
78 ton Bipel Preform, Model 70T, complete
6½ ton Manesty, Model BB3A, 27 station
6½ ton Manesty, Model BB3A, 33 station
4 ton Manesty, Model F–3, single punch

REFRIGERATION
200 ton Lewis Package Chiller, complete
30 ton Application Engineers, Package Chiller
15 ton Application Engineers, Package Chiller
10 ton Application Engineers, Package Chiller
7 ton Meyer Package Chiller
5 ton Dunham Bush Package Chiller
5 ton Peuchen Package Chiller, (2)

SCREENS
48" Sweco, S/S, 1 deck
30" Sweco, S/S, 2 deck
18" Kason, S/S, 1 deck, unused (3)
36"x96" Rex-Carrier, 1 deck, S/S (4)
20"x48" Rotex, 1 deck, S/S

HEAT EXCHANGERS
Shell and tube heat exchangers, stainless steel, up to 2000 sq. ft. surface area–dozens!

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EQUIPMENT WANTED
GOOD, USED, CHEMICAL, PHARMACEUTICAL & RELATED EQUIPMENT – CENTRIFUGES, DRYERS, FILTERS, REACTORS, TANKS ETC.
WE WILL PURCHASE INDIVIDUAL ITEMS OR COMPLETE PLANTS.
CALL OUR OFFICE TODAY. TOP DOLLARS PAID. NO DEAL TOO BIG OR TOO SMALL.

DRYERS
Drum Dryers/Flakers
(1) 24" dia. x 36" Buflovac SS dble. drum dryer
(2) 32" dia.x 108" Blaw Knox CI dble. drum dryer
(1) 32" dia. x 17'6" Sandvik SS belt flaker
(1) 36" dia.x 10' Buflovak CI dble. drum dryer
(3) 42" dia.x120" Blaw Knox CI dble. drum dryer
(1) 48" dia.x 28" drum flaker, chrome plated drum
(1) 48" dia.x 40" CI flaker, mfg. by Buffalo Foundry
(1) 48" dia.x 40 drum flaker, nickel plated drum, mfg. Blaw-Knox

Fluid Bed
(1) 60 Kg. Aeromatic, Batch, 6'x8', 66,000
(1) 100 Kg. Aeromatic Model ST 100, sanitary SS
(1) Fitzpatrick Model FA 250, SS, 20 HP XP

Holoflite
(1) Western Precipitation Model P60SSO-A, twin screw, 12" dia. x 20' long, SS constr., jckt. rated 15 psi, complete with 7.5 HP vari-speed drive.
(1) New/Never-Used Joy Processor, CS, single screw, 16"x16' long, rated 110 psi @ 340° F., sprocket & chain drive by 1.5 HP varispeed drive.

Rotary Vacuum
(1) 200 Cu. Ft. Stokes, SS constr., compl.
(2) 165 Cu. Ft. Pfaudler, Double Cone, G/L, 30 #FV/60 psi jktd., 18 HP vari-drive
(1) 150 Cu. Ft. Blaw Knox, Nickel
(2) 132 Cu. Ft. Stokes, Nickel
(1) 72 Cu. Ft. Blaw Knox, SS
(1) 60 Cu. Ft. Titanium Double Cone
(1) 50 Cu. Ft. Gemco, 316SS sanitary, double cone
(1) 37.6 Sq. Ft. Horiz. Thin Film, vac. int. & 150 psig, 304/316SS
(1) 30 Cu. Ft. P-K Twin Shell, 304SS
(1) 20 Cu. Ft. Abbe Twin Cone, 304SS

Spray
(1) 30"x3' Bowen Laboratory w/3' cone bottom, SS constr., w/centrifugal atomizer, 3 HP blower & motor.(1)
(1) Niro lab size 32"diax2'w/2'cone w/centrif. atomizer SS contacts
(1) 7'10" Dia. Anhydro Complete System, sanitary SS
(1) 16' dia. Bowen compl. system SS contacts, new 1978

CENTRIFUGES
(1) Deleval GRPX 309, SS, 2DHP
(1) Unused Model B-1D Podbielniak, Alloy 20
(1) Sharples AS-26, SS
(2) Sharples AS-16P, 316SS
(1) Alfa-Laval SS Decanter, Horiz., Mdl. NX314
(2) Dorr Oliver Mdl. CH30 CSU "Merco," 316SS contacts, 150 HP
(1) Baker Perkins S-82 "Pusher Type," SS, 50 HP
(1) Bird 16" x 28", 316 ELC, contour bowl.
(2) Bird 24"x38", 316SS, 40 HP
(3) Sharples P-3000, 316SS, 30 HP
(1) Sharples P-1000, SS 20HP
(1) Unused Bird 36 x96, 317L SS
(1) Tolhurst 48" x 24" perf. basket, 316SS sanitary, auto. plow & discharge, rated 88 #/cu. ft. @ 900 RPM, 20 HP XP.
(1) Tolhurst 48" x 24" Batchmaster, 316SS, perf. basket, w/hydr. plow & 20 HP hydr. drive
(1) Tolhurst 48"x24" Batchmaster, rubber lined, perf. basket, w/hydr. plow & 20HP hydr. drive
(2) Tolhurst 48" x 24" Batchmaster, Heresite lined, perf. basket, w/hydr. plow & 20 HP hydr. drive
(1) Western states 48"x 24", 316 SS
(1) Fletcher 48"x 28" Suspended type, SS perf. basket, 20/10 HP
(1) Sharples Tornado 48" x 30", 316SS, perf. basket, 40 HP XP
(1) Alfa Laval Model MAPX 210 T24, SS wetted parts
(2) Sharples C-27, 316 SS, wetted parts, 40 HP
(1) Sharples C-20, Super-D-Hydrator, SS, 30 HP
(1) Dorr Oliver Merco Screener Model C-400 X2, all SS, twin screw disch., 10 HP

PARTIAL LISTING ONLY

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DISMANTLING
RE-ERECTION
DEMOLITION

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9850 SCFM Thermo Energy Recovery System

ATTRACTIVELY PRICED
1 – Approx. 51 Sq. Ft., Pfaudler, Wiped Film Evapor. 316 SS wetted parts ASME Coded, jacket rated 100 psi w/internal vacuum. Complete w/flange mounted motor to Pfaudler TW drive w/-mechanical seal, lubricator & integral heat exchanger.
Call today for more details.

EVAPORATORS
(1) 1 Sq. Ft. Artisan "Kontro" Ajust-O-Film sys., 316SS
(1) 1.4 Sq. Ft. Luwa Wiped Film, 316SS, 1.5 HP
(1) 1.4 sq. Ft. Luwa thin film SS
(1) 2.5 Sq. Ft. Rodney Hunt Turbo Film 347 SS
(1) 5.4 sq. Ft. Luwa filmtruder, 316 LSS
(1) 6.54 Sq. Ft. Votator Evaporator System, 315 SS contacts, 16 psi & FV & int., 150 psi jkt.
(1) 8.7 Sq. Ft. Rodney Hunt Turbo-Film, 304 SS contact parts, 15 psi & FV/150 psi jckt.
(1) 10.6 Sq. Ft. Luwa SS Wiped Film Evap. System, 15/660 psi
(1) 19.5 Sq. Ft. Votator Turba-Film, 304 Sanit. SS FV/150 psi 10HP
(1) 20 Sq. Ft. Kontro Horiz. Adjust-O-Film, 316ELC, 50 psig, 15 HP
(1) Approx 31 Sq. ft. Vert., Turbo-Film Processor, 304 SS Contacts
(1) Like New 37.6 Sq. Ft. Luwa Horiz. Thin-Film Dryer, 304/316L SS
(1) 40 Sq. Ft. Kontro Adjust-O-Film, SS constr., 20 HP
(1) 47 Sq. Ft. Artisan Rising Film, Hast. "C"
(1) Approx 51 sq. ft. Pfaudler Wiped film, 316 SS, 100/65 & FV
(1) 80 Sq. Ft. Kontro Wiped Film Syst., SS constr, FV/150 psi, 40 HP
(1) UNUSED 86 sq. ft. Luwa thin film dryer horiz. 316 L wetted parts, FV int., 150 psi sat steam jkt
(1) 141 Sq. Ft. Rodney Hunt Turbo-Film, 316 SS 15 psi int., 35 psi jkt 40 HP XP

●●●TANKS-ALL TYPES & SIZES

BLENDERS
600 Cu. Ft. Jktd. Dbl. Rbn., CS
Approx. 460 Cu. Ft. CS, 75HP
UNUSED 460 Cu. Ft. Marion Paddle, CS, 75 HP
300 Cu. Ft. CS Dbl. Cone, 30 HP
200 Cu. Ft. KS 316SS Dbl. Cone
178 Cu. Ft. P-K Twin Shell, 316SS
69.3 Cu. Ft. CS Dbl. Cone, 7.5 HP
63 Cu. Ft. Marion Paddle, CS
60 Cu. Ft. 304 SS P-K, Twin Shell, w/int. bar
60 Cu. Ft. Gemco Dbl. Cone, 304SS
30 Cu. Ft. P-k, 304 SS, W/liq. bar.
20 Cu. Ft. P-K, Twin shell, SS
15 Cu. Ft. Robinson Dbl. Rbn. CS
18 Cu. Ft. WC Marion SS
10 Cu. Ft. Gemco dbl. cone, CS, 1½HP
10 Cu. Ft. P-K Sanit Twin Shell 1½HP
10 Cu. Ft. Howes, CS, Dbl. Rbn.
5 Cu. Ft., SS, Dbl. Cone W/liquid-solids bar
2 Cu. Ft. P-K Twin Shell, SS Constr., w/pin int. bar
10" P-K zig zag

FILTERS
Pressure Leaf
1–562 Sq. Ft., 316ELC, Hercules, 28 leaves
1–512 Sq. Ft., 316SS, Niagara, 21 leaves
1–400 Sq. Ft. R/L Sparkler
1–327 Sq. Ft., 304SS, Ind. Filter, 11 leaves
1–320 Sq. Ft. Durco 316 SS, 11 Leaves
1–259 Sq. Ft. Pronto Mdl. #3259, 75 psig
1–Approx. 205 Sq. Ft., SS, Sparkler, Horiz.
1–200 Sq. Ft., SS, Hercules, Horiz.
1–191 Sq. Ft. Enzinger, SS, Vert., 75 psi
1 – 157.64 sq. Ft. Sparkler model 55-5-20, 316SS
1–150 Sq. Ft. Horiz., 12 Vert. Leaf 316SS
1–135 Sq. Ft. Ni, Bowser, Vert.
1–35 Sq. Ft. Hercules Model 5, 316 SS, horiz. tank vert leaves 50 psi

Rotary Vacuum
1–58.5 Sq. Ft. KS, Inconel 600
1–56.5 Sq. Ft. K-S, 316SS, flexibelt disch.
1–57.52 Sq. Ft. Feinc, SS wetted parts, spring disch., 56" dia. x 6' face drum
1–152 Sq. Ft. Dorr Oliver, 304SS, maxi-belt disch.
1–200 Sq. Ft. Elmco, 316SS, 8'x8'
4–250 Sq. Ft. D.O. 316L SS Precoat, 8' x10', sanit
1–250 Sq. Ft. K-S 316SS, coil disch.
1–300 Sq. Ft. Elmco, 316SS wetted parts, precoat type w/knife disch., 10" dia. x 10' drum, compl. w/control panel & aux. equipment
1–314 Sq. Ft. Elmco, precoat disch., 316SS
1–400 Sq. Ft. Elmco, CS, Precoat
1–500 Sq. Ft. Elmco, 316SS, belt disch.
1–3'x1' 316SS, knife disch.
1–3'x1' Dorr Oliver, FRP w/receiver & Nash H4 vac. pump, 10 HP
1–3'x 1' K-S comp. sys., 316 SS Flex-belt disch

RECENT PURCHASES
Propane Storage System
120,000 gal. Capacity Propane Storage System consisting of 2-60,000 Gal. Propane Tanks Compressors, Pumps
400 gal. G/L Pfaudler [illegible] clever, 55 Psi
1750 gal. Reactor 316 SS [illegible] int. 40 psi Jckt
St Regis Bag Packer [illegible]
5000 Gal. 304 SS [illegible] Tank
[illegible]

Alfa-Laval Centrifuge, Model NX214/314
8000 gal. CS Ammonia Storage Tank, 250 PSI
[illegible]

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GLASS...GLASS...GLASS
WE ARE GLASS SPECIALISTS WITH A TREMENDOUS INVENTORY FEATURING UNUSED, USED AND REGLASSED ITEMS. OUR SHOP PERSONNEL ARE FULLY TRAINED TO HANDLE GLASS.

REACTORS
Glass Lined
4,000 Gal. Pfaudler, 100/90 psi, TW
1,000 Gal. Pfaudler, 100&FV/90 psi, 4RW
1,000 Gal. Pfaudler, RA60 Series, 100& FV/90 psi, 4DW
1,000 Gal. Pfaudler, RA60 Series, 100& FV/90 psi, 4TW
800 Gal. SS clad, 60/60 psi
750 gal. DeDietrick, Phila drive
500 Gal. Pfaudler, 100&FV/85 psi, BH drive
75 Gal. Pfaudler, 25 & FV/55 psi, 2 HP
50 Gal. Pfaudler Body-UNUSED, 28 FV/-100psi
*Partial Listing - Much More Inventory Glass Lined Storage Tanks & Parts also Available.

Stainless Steel
4,000 Gal. 316SS, Atmos./50 psi, withcoils
3,000 Gal. 347SS Blaw Knox, 150/50 psi
2,500 Gal. 316L SS, 75/75 psi, 150 psi int. coils
2000 Gal. Nooter Autoclave, 316L 2000 psi, FV int. coils
2,000 Gal. Dusenberg, 316 SS, 15/35 & FV int., 50 psi jkt.
1,750 Gal. 316SS Nolto, 1487/50 psi
1,500 Gal. 304SS, 10 HP Lightnin
1,000 Gal. 304SS, 250/60 psi
1,000 Gal. 316SS, 50/75 psi jkt
750 Gal. 316SS, 75 & FV/50 psi
750 Gal. 304SS, 50/60 psi
600 Gal. 316SS, 3000psi, 10 HP
600 Gal. SS, 50 psi, 1.5 HP XP
500 Gal. 316SS, 55 & FV/55 psi
100 Gal. 316SS, 15/50 psi
100 Gal. 316ELC SS, 500/90 psi

★★★ SPECIAL OFFER ★★★
1-UNUSED, never installed Krauss Maffei Turbo Tray Dryer, 29 trays, 9' 9"dia., 316 L SS, all other wetted parts 316 SS, complete unit.
PRICED TO SELL

MIXERS
4.5 Gal. Kneader Master Cont., SS w/jkt.
5 Gal. AMK 304SS Jcktd. Kneader Extruder
15 Gal. W.C. Readco Sigma Blade Dbl. arm
25 gal. Readco DBL/Arm Sigma Blade jktd. SS construction 15 H.P.
60 Gal. Hockmeyer Pony, SS contacts, 7.5 HP varispeed
100 Gal., SS, Sigma Blade, Jcktd. 40 HP
500 liter Welex hi intensity, SS contact parts
200 gal. W-P CS dble arm Sigma blade, 20 HP
250 gal. AMK Kneader Extruder, Sigma Blades, CS constr., 40 psig, trough jkt.
500 Gal. S-W Rubber Cement, CS, 2-10 HP motors (2)
Unused 1000 Gal. Sanitary 316SS B-K Dbl. Motion Change Can; 100&FV/165 PSI, 125HP
Littleford Model FKM-600D, SS
Littleford Model FKM-600S, SS
Littleford Model FKM-2000, SS, w/choppers
Littleford Model FM 100 Sanit. SS w/choppers
Prodex Henschel 3.5 Cu. Ft. Mdl. 35 JSS, SS Const.
7 Cu. Ft. 304SS Nauta Model MBX-70
[illegible] Cu. Ft. Nauta D-105, CS
[illegible] Hockmeyer High Speed Disperser
10 HP Hockmeyer High Speed Disperser
Welding Eng. Model 2FV1V2S Twin screw Extruder, SS, Contacts, 150 psi

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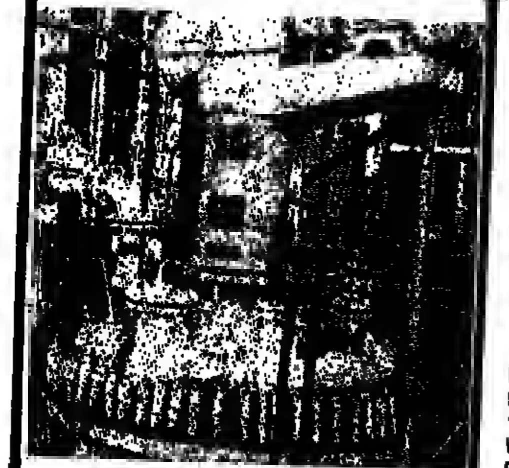

KETTLES–REACTORS, SS

30,000 gal. 304SS fermentors, 14' x 24', 25 psi/vac., coils, 200 HP agit. (4)
5,000 gal. 304SS, atm. int., 75 psi jkt., agit.
4,100 gal. 304SS kettle, 16 psi jkt., 6 HP agit.
3,500 gal. 316SS kettle, 20 psi jkt., 7½ HP agit. (2)
2,500 gal. 304SS reactor, 75 psi/FV int., 150 psi jkt.
1,500 gal. 304SS kettles, jktd., 5 HP agit. (3)
1,150 gal. 304SS reactor, 16 psi int., 25 psi jkt., 5 HP agit.
900 gal. 304SS reactor, 75 psi/FV int., 150 psi jkt., agit.
600 gal. 304SS reactor, 300 psi int., 75 psi jkt., coils (3)
500 gal. 304SS reactor, 150 psi int., 150 psi jkt., 5 HP agit.
300 gal. 316SS reactor, 75 psi/FV int., 80 psi jkt.
(50)... 316SS and 304SS reactors and kettles from 5 gallon to 400 gallon... call for list.

BIG PFAUDLER 316SS REACTORS

(3) 15,000 gal. Pfaudler, 316SS, 12'0" x 15', 100 psi, 200 psi jkt. Agit.
(4) 10,000 gal. Pfaudler, 316SS, 11'0" x 12'4", 100 psi, 150 psi, jkt. Agit.

REACTORS–GLASS

2 gal. Pfaudler, 750 psi/FV, 700 psi jkt.
20 gal. Pfaudler, 35 psi, 100 psi jkt., agit. (2)
30 gal. Pfaudler, jktd.
50 gal. Pfaudler, 25 psi, 100 psi jkt.
50 gal. Pfaudler, 100 psi/vac., 85 psi jkt., agit., 1975
100 gal. Pfaudler, 25 psi, 90 psi jkt., agit.
150 gal. Pfaudler, 25 psi/vac., 90 psi jkt., agit.
300 gal. Glascote, 25 psi/vac., 90 psi jkt.
500 gal. Pfaudler, 100 psi/vac., 90 psi jkt., vari-drive agit.
500 gal. DeDietrich, 65 psi/vac., 105 psi jkt., 5 HP agit.
750 gal. Pfaudler, 25 psi, 85 psi jkt., 5 TW agit.
1,000 gal. Pfaudler, 100 psi, 90 psi jkt.
1,000 gal. Pfaudler, 75 psi/vac., 90 psi jkt., 10 HP agit.
1,500 gal. DeDietrich, 100 psi/vac., 90 psi jkt., 1981,
1,500 gal. Pfaudler, 100 psi/vac., 90 psi jkt., 25 HP agit.
2,000 gal. Pfaudler, 100 psi/vac., 90 psi jkt., 15 HP agit.
2,500 gal. Pfaudler, 150 psi, 90 psi jkt., #TW6 agit.

NEW LIQUIDATION! CHEMICAL/POLYMER PLANT....ILLINOIS ..BUY BEFORE REMOVAL AND SAVE!!

Bird 32x50, 316 SS centrifuges, 80: 1 (2)
323 CFM Worth 4 BB-2 Air Comp., 125 psi 75 HP (2)
24" Conair Pelletizers, mdl. 1024, 40 HP (2)
6'x25' SS Rotary Hot Air Dryers, 10 HP, (3)
6" Welex Extruder, 400 HP, 30/1 L/D
8" Welex Extruder, 700 HP, 30/1 L/D (3)
6" Welex Extruder, 600 HP, 30/1 L/D (2)
K-Tron Twin Screw Vol. Feeder, SS, 7000 #/HR, (4)
352 BF Sparkler, VR-32-32, 75# Steel (2)
1500 gal. Pfaud. Reactor, 316 L SS, FV/150 psi, 3 HP (2)
10,000 gal. Pfaud. 316L Reactor, 150/FV/150 psi, 80 HP (4)
15,000 gal. Pfaud. Reactor, 316L SS, 100/FV/200 psi, 100 HP (3)
25 cu.ft. SS Ribbon Blender, 5 HP (3)
60" Sweco Screen, SS, 1-Deck
60" Kason Screen, SS, 1-Deck
4800 gal. Horiz. R/L Tank, 15 psi, 6'x21'
12,000 gal. Brighton 316 SS Tank, 12x14, 20 HP agit. (2)
17,000 gal. 316 SS Tank, 13 dia. x 16 ft. High, 20 HP agit.
PHONE (609) 267-1600.

DRYERS

BLAW Knox 5'4" x 40' SS vac. dryer, 600 cu. ft.
Blaw Knox 36" x 20' vac. dryer 316L SS, 72 cu. ft.
Blaw Knox 66" x 36' vac. dryer, nickel
Mathis 24"x48" flaker, chrome plated
Sandvik 48"x24' SS belt flaker, UNUSED
Sargent 60" x 45' SS conveyor dryer
Stokes 8" x 11" drum flaker
Blaw Knox 32" x 90" dbl. drum
Buflovak 42" x 120" dbl. drum, 150 psi
Aeromatic #ST-5 fluid bed dryer, 5/10 KG
Witte 36" x 10' fluid bed, SS, sanit.-cooler
Stokes 36 sq. ft. Lyophilizer freeze-dryer
Renneberg 36" x 20' rotary dryer, 316 SS
Renneberg 5'x 25' 304SS rot. hot air dryers, w/cyclone, etc. (2)
96" x 50' Louisville SS rotary dryer
10' x 100' GATX rot. steam tube dryers, 140 psi (4)
Wyssmont #VTL-24 Turbo-tray dryer, 304SS
P-K 6 cu. ft. vac. dryer, 304SS
P-K 20 cu. ft. vac. dryer, 304L SS (2)
Abbe 30 cu. ft. 304SS vac. dryer
Devine 110 cu. ft. 304 SS vac. dryer
Pfaudler 165 cu. ft. glass-steel vac. dryers (2)
Abbe 325 cu. ft. 316SS vac. dryer
Devine 370 cu. ft. 316SS vac. dryer
Devine 564 sq. ft. vac. shelf dryer
Niro 30" SS spray dryer
Turbulaire 48" x 7' spray dryer
Bowen 72" spray dryer, SS
Bowen 96" spray dryer, SS

FILTERS–VACUUM

36" x 1' Ametek, 316SS, 9 sq. ft.
40" x 3' Bird-Young, SS, 48 sq. ft.
4' x 15' Eimco, 316SS, 64 sq. ft., horiz.
5' x 3' Ametek, SS, 55 sq. ft.
5' x 4' Eimco, "Eimcomet" polypropylene, UNUSED
5'x6"x 14'-9" Passavant 200 belt press, 250 sq. ft., 1982 (4)
8' x 8' Eimco, SS, 200 sq. ft., precoat
8' x 10' Dorr-Oliver, 250 sq. ft., 316SS, precoat
8' x 12' Eimco, 316SS, precoat, 300 sq. ft., (3)
8' x 14' Dorr-Oliver, 316SS, precoat, 350 sq. ft. (2)
10' x 10' Eimco, 316SS, precoat, 314 sq. ft.
11'6" x 16' Eimco, SS contacts
12' x 12' Impco, 304 SS, 450 sq. ft.
12' x 14' Komline, 304SS, 528 sq. ft., flexibelt disch. (2)
45' dia. Eimco tilting pan. vac. filter, 316 SS

FILTERS–PRESSURE

12 sq. ft. Ametek/Niagara #12, SS
54 sq. ft. Fundx, SS, jktd.
65 sq. ft. Artisan "Dynamic" filter/washer, SS (2)
320 sq. ft. Durco, 316L SS
600 sq. ft. U.S. Autojet, 316SS, sanit.
1000 sq. ft. U.S. Autojet #1000, 304SS
13" Horman filter press, 21 plates, SS, sanit.
30" Sperry filter press, 11 cu. ft.
35" Shriver filter press, 546 sq. ft., hydraulic
42" Shriver filter press, 777 sq. ft., hydraulic
43" Shriver ALP recessed filter press, SS, 276 sq. ft.
48" Clow, polypropylene recessed, 1500 sq. ft.

PULVERIZERS

Mikro #6MA atomizer, 5 HP
Mikro #6MA atomizer, SS
Mikro #2DH pulv., SS, 5 HP
Pallman #REF6 pulv., 100 HP
Pallman #PP6 pulv., 50/75 HP
Abbe porcelain pebble mills... 36"x42", 36"x48", 42"x60", 48"x60", 50"x48" (7)
Raymond 50" 5-roller hi-side mill, 1981, UNUSED
Raymond #6055 Hi-side roller mills, dbl. whizzer (2)
Raymond #73612 Hi-side roller mill, dbl. whizzer

NEW LIQUIDATION DRY DETERGENT MFG. EQUIP. ...NORTH JERSEY!

5-Cleveland 120 cu. ft ribbon blenders, 60 HP drive, w/ surge hoppers
5-60' C/C steel bucket elevators
5-Kiefsler bag type dust collectors
1-J.H.Day 200 gal. sigma blade mixer, jktd., 40 HP
2-Moyno Pump # IL65SQ, 5HP.
2-FMC-Stokes form, fill & seal units
2-Eriez #62S vibratory feeder, SS, 60"x 18"x 24", UNUSED
2-Toledo digital electronic scales: 800#, 2500# cap.
1-Fairbanks 200# electronic scale
1-Hesser volumetric powder carton filler.
2-Standard-Knapp case gluers
1-Hercules drum mixer
1-200 gal. SS tank, jkt. & agit.

Over (50) Bird & Sharples decanters

CENTRIFUGES

Sharples P-5400 D-Canter, 316SS, Carbide tiles, talx (2)
Sharples P-3400 D-canter, 316SS, tiles (2)
Sharples P-5000 D-canter, 316SS
Sharples P-660 D-canter, 316SS, back drive
Bird 12" x 30", 316SS, Decanter, 20 HP
Bird 18" x 28", 316SS, Decanter (3)
Bird 18" x 42" Decanter, steel, 10/30
Bird 24" x 38" Decanter, 304SS, contour-10
Bird 24" x 38" Decanter, 316SS, contour (3)
Bird 24" x 60" Decanter, steel
Bird 24" x 96" Decanter, SS, 125 HP
Bird 24" x 96" decanter, 304SS, carbide tiles, 1981, UNUSED (3)
Bird 32" x 50" Decanter, Monel, contour (2)
Bird 32" x 50" Decanter, 304SS, contour
DeLaval NX214-31B Decanter, 304SS, 20 HP (2)
Sharples AS16V "Super," SS (5)
Sharples AS26V "Super," SS
DeLaval SRPX-213-30, 316SS separator/desludgers (3)
Westfalia SAMN15037, Desludger/Separator, 316SS
Westfalia SA14-35-076 3-way separator, 316SS
Krupp 10" pusher, 316SS, 15 HP
Baker-Perkins 19" pusher, 304SS, 40 HP
Sharples 48" T-1500 auto-basket, 100 HP
Tolhurst 48" Batchmaster, rubber lined, 30 HP
Sharples 48" Tornado-Matic, SS, 25 HP
Delaval 48" Mark 111, 316SS hyd.
CENTRIFUGE PARTS... Sharples, Bird, DeLaval, etc.

EVAPORATORS

2.4 sq. ft. Rodney-Hunt SS, 3 HP
21 sq. ft. Rodney-Hunt Turbafilm #4, SS
87 sq. ft. Rodney-Hunt, 304 SS, Turbafilm
100 sq. ft. Pfaudler, 316L SS, wiped film
600 sq. ft. Goslin-Birmingham dbl. effect, SS
854 sq. ft. Buflovak dbl. effect, SS
1415 sq. ft. Vulcan, 316SS
1688 sq. ft. Roger dbl. effect, SS
Swenson 316SS continuous crystallizer, 6" x 14'

TANKS & VESSELS

30,000 gal., 304SS, 14' x 24', coils, 200 HP agit. (4)
30,000 gal. steel propane tanks, horiz. 250 psi (5)
20,000 gal., 304SS, 12' x 24' (2)
17,000 gal., 304SS, 11' x 24' (3
17,000 gal., 316LSS, 14' x 13', Agit. (2)
12,000 gal., 316LSS, 12' x 14', Agit. (5)
10,500 gal., 316L SS, 3' x 25'
10,400 gal., 304SS, 10'6" x 13', agit.
8,000 gal., 304SS, 10'6" x 12'
5,000 gal., 304SS, 9'x9', 25 HP agit.
3,500 gal., 304SS, 3'x3'
3,000 gal., 304SS, 7'x 10', agit.

MIXERS, BLENDERS

3.5 cu. ft. Henschel #FM150, 17/20 KW
11.5 cu. ft. Henschel #115JSS, 92/46 HP
13.7 cu. ft. Lodige #W600/K1200, mix/cool comb.
18 cu. ft. Strong-Scott 304SS ribbon blender (3)
20 cu. ft. P-K twin shell SS
35 cu. ft. Day Nauta, #NBX350, SS
60 cu. ft. Demco, TW SH, Sanit, SS
69 cu. ft. Patterson dbl. cone, SS
70 cu. ft. Day Nauta, #N3700, 10 HP
73 cu. ft. Day Nauta, SS, jktd.
75 cu. ft. Robinson SS ribbon blender, jktd. (2)
98 cu. ft. Day Nauta, SS, 1981
110 cu. ft. J.H. Day, dbl. ribbon, 316SS
120 cu. ft. Cleveland ribbon blenders (5)
169 cu. ft. Pfaudler, dbl. cone, glass steel jktd., vacuum
200 cu. ft. Young, ribbon, SS
313 cu. ft. Sprout-Waldron ribbon blender, SS, jktd.

(6) Nooter 4'x 14' 316 SS rot. vac. dryers, 1982, NEW

LIQUIDATION

NEW & UNUSED PROCESS EQUIP., 1982, IN ORIGINAL PACKING ... SOUTH CAROLINA, CALL Phone (609) 267-1600

BALERS, Diepozepek #D800 balers, (2)
SAG PACKER, Howe-Richardson #[illegible] semi-automatic bagging system SS contacts, heat sealed closer, etc.
BINS, 304L SS contacts, 1300 cu. ft./[illegible] gal., 11'8" x 11'8" x 18" high, steel reinforced (8)
CENTRIFUGE, Bird 24" x 98", 304SS, Model [illegible] solid bowl continuous, 10 deg. contour bowl, Tungsten carbide tiles on conveyor, [illegible] 2900 RPM bowl speed (3)
CHLORINATION SYSTEM, Wallace & Tiernan #V800 floor mounted modular chlorinator
COLUMN, 48" dia. x 15'9", 304SS [illegible] columns, designed for agitation (2)
CYCLONE, DuCon Model 700/175 304SS high efficiency cyclones, size 210, Type VM (8)
DRYERS, Nooter 4' x 14' rotary vac. dryer, 316 SS shell and jacket, Incoloy ribbon agit. ASME 100 psi/FV int. & jacket. 100 HP packaged Reliance drive with freq. converter
FEEDERS, Acrison gravimetric weigh feeders, Model 403-15,000-3,000-SOF-4, 304 SS contacts, Model BDF-4 volumetric feeder, Size "R" metering, auger and disc. cylinder, etc., etc... all SS contacts
FURNACE, C-E Air Co. "Cor-Pak" thermo [illegible] dizers, direct gas fired 8'x2" W x 7'3" H x 12'8" L (4)
MIXER, Air mix blender system, Koppers-Sprout Waldron #38-50, 500 cu. ft., 304SS, [illegible] 19'10" w/483 sq. ft. dust collector (2)
MIXERS, Webb, 59" W x 15'L twin shaft paddle mixers or pug mills, 304SS contacts, (2)
PACKAGING SYSTEM, design to fill bags, palletize, shrink wrap, etc. automated system
PULVERIZERS, Mikro #4TH pulverizers, 125 HP drive, (15)
PULVERIZERS, Mikro #4MP pulverizers, 125 HP drive (5)
PULVERIZERS, Mikro #1SCS, 7½ HP, rotary air lock & 304SS disc. chute
PUMPS, Able #H18-57-48 triplex pump, [illegible] GPM @ 1500 psi, 50 HP
PUMPS, Peabody #14DOH-2 cooling tower pumps, 2000 GPM at 140' head, 100 HP
SHRINK WRAPPERS, CTX Prod. #PSBV[illegible] shrink wraps with oven

PNEUMATIC TRANSFER BLOWER PACKAGES

(30) Roots "Whispair" positive blowers packaged by Flo-Tronics, for pneumatic transfer...150, 100, 50, 40, 25, 20, 10, 5 HP sizes...ALL NEW!

PERRY for Process Equipment

PERRY EQUIPMENT CO. INC.
WORLD HEADQUARTERS...
Box "O", Hainesport, New Jersey 08036
Phone: (609) 267-1600 • Cable "PERI" • Telex 84-5397

CLARK COMPRESSORS

RECIPROCATING (MOTOR DRIVEN)

CBA–4, 3000 hp Drivers (3 Available)
CRA–2, 900 hp Drivers (2 Available)
RA–1, 350 hp Drivers (2 Available)
CMA–4, 400 hp Drivers (1 Available)

CYLINDERS

*Six 10¼ x 17, Lined from 12¼ cast steel, 2000 PSI
Three 7⅛ x 17, forged steel
Three 5⅞ x 17, forged steel
Two 18 x 14
Two 29 x 14
Four 10½ x 8

CENTRIFUGALS

3M5/2M7, 2500 hp Driver
2M-10, 4000 hp Driver

*ATTENTION HBA FANS

Our Inventory includes many other cylinders compatible with these frames, other frames compatible with these cylinders, and other drivers for Reciprocating and Centrifugals. Call Jack Burch.

LC EC

LOUISIANA CHEMICAL EQUIPMENT COMPANY
P.O. Box 1490 Laporte, Texas 77571
(713) 471-4900 TLX 77-5653

NEW ARRIVALS

12"x30" BIRD Centrifuge, 316 Stainless with 20 HP motor. (Ref #23692).

18"x28" BIRD Centrifuge, 316 Stainless 10 deg Bowl, 80:1, with 15 HP motor. (Ref #23693).

24"x38" BIRD Centrifuge, 316 Stainless 15/3 deg Bowl, 40:1, with 40 HP motor. (Ref #23694).

500 HP CLEAVER BROOKS BOILER, gas-fired, 17,250 PPH, 150 PSI, New 1971. (Ref #23695).

UNUSED 500 HP CLEAVER BROOKS BOILER, gas-fired, Series 700, 17,250 PPH, New 1975. (Ref #23696)

ALSO AVAILABLE

HEIL Rotary Dryer, Model 105-32, 3-pass, 10'6" Dia X 32' with 100 HP HEIL BLOWER ASSEMBLY. (Ref #20104).

(4) BELIOTT DEWATERING PRESSES, Model 2919 36" X 56", 304 Stainless, driven by 10 HP motors. (Ref #20106A & #20106B).

2-UNUSED HOCKMEYER 200/100 HP explosion proof disperser, tank mount, Stainless Steel shaft, manufactured 1982

NEVER INSTALLED

STUART EQUIPMENT CO.
P.O. Box 469 North Chicago, IL 60064
312-473-4500

RAYMOND

PULVERIZING MILLS
Immediate Shipment
(312) 541-5600
wabash

Wabash Power Equipment Company
444 Carpenter Avenue, P.O. Box C, Wheeling, Illinois 60090
Phone 312/541-5600 TELEX 28-2588

Tanks: 250-1600 Gal. storage & mixing, S/S & fiberglass
5000 Gal. 304 S/S storage tank, vertical, closed, dished hds.
(2) Richmond 3000 Gal. S/S Reactors, 60/40 PSI, 50 HP 2-Spd.
Richmond 3000 Gal. S/S Reactor, 60/40 PSI, 20 HP.
(3) Pfaudler 30 Gal. S/S Reactors, 60/90 PSI, 1½ HP XP V/S.
Vaculine 500 Sq. Ft. "Roto-Jet" Filter, 316 S/S, 60 PSI.
Jacobson 60SF-11 "Universal" Hammer Mill, 100 HP.
(2) Entoleter Type E6M "Centrimil", 48" Dia., 316 S/S, 150 HP.
Simpson "Rotex" model 861 Sifter, 316 S/S, single deck.
Fitzmill, 316 S/S, No. DKAS012, 20 HP.
Holo-Flite Screw Dryer, 16" Dia. x 20' L., C/S, Jkt. trough.
Chromalox 200 KW Hot Oil Unit.
Chromalox 20 KW Hot Oil Unit (ALL XP)
Sterling 12 KW Hot Oil Unit.
Hockmeyer 50/25 HP High Speed Disperser S/S, XP # 2 Spd.
Cowles 60 HP V/S Disperser, XP, S/S, High-speed.
(3) Gustmeyer model SRS Sand Mills, 30 HP XP.
Morehouse-Cowles 12-30 & 10-25 Sand Mills, 40 & 25 HP XP.
Patterson Steel Ball Mills, 6'x8' & 5'x5' and other sizes.
Abbe No. 13 Continuous Steel Ball Mill, 60 HP.
Patterson & Abbe Ceramic-Lined Pebble Mills from 15"x21" up.
Reliable 6"x12" Two Roll Mill, 5 HP.
36 Cu. Ft. C/S heavy-duty ribbon blender, 10 HP XP.
(2) Leitch S/S sanitary ribbon blenders, 12.25 Cu. Ft., 2 HP.
J.H. Day "Nauta" Blender, 21 Cu. Ft. [illegible]
[illegible] L Tubes, 316 S/S, 15 HP.
Dorr-Oliver "Vak-Trol" 6'x8' Rot. Vac. Filter, 316 S/S.
Crandall 5-Gal. subsurface weigh-type filler, S/S, model F-2.
Turba-Film 1.13 Sq. Ft. Lab evaporator, 316 S/S, 1 HP complete.
Niro 10 ft. Dia. Spray Dryer, 129 #/Hr., all S/S.
Baker Perkins & Readco dbl. arm mixers; 2½ to 350 gal., C/S, S/S
Patterson-Kelly 5 cu. ft. V-Blender, S/S, 108 #/c.f.
Heat Exchanger, 486 sq. ft., 304 S/S, 75/15 psi.

A-1 CHEMICAL EQUIPMENT CO.
59 EAST 21st STREET CHICAGO, IL 60616
(312) 842-2200

JUST PURCHASED SHARPLES CENTRIFUGE 30" x 13" SOLID BASKET TOP LOAD, STAINLESS

BLENDER-330 Cu. Ft. Areco Steel End
BLENDER-10 Cu. Ft. Gemco-Matic Stainless
CENTRIFUGE-48" x 30" Western States Perf., S.S. 316
CENTRIFUGE-#5500 Podbielniak S.S. 316 PUP Series
COLUMN-36" x 20' Pfaudler Glass Packed
COLUMN-24" x 30' Pfaudler Glass Packed
COMPRESSOR-800 CFM @ 125 PSI Clark ICA-6, 150 HP
COMPRESSOR-400 CFM @ 100 PSI Fuller C-80-8CH, 100HP
DRYER-5 cu. ft. P.K. Conical Vacuum Stainless
EVAPORATOR-6.54 sq. ft. Rodney Hunt S.S. 316 System
EVAPORATOR-1 sq. ft. Rodney Hunt S.S. 316 w/Condenser
EXCHANGER-366 sq. ft. 304 S.S. 150/150 PSI UNUSED (4)
EXCHANGER-276 sq. ft. 304 S.S. 175/175 PSI UNUSED (2)
EXCHANGER-175 sq. ft. 316 S.S. 150/150 PSI Code
EXTRUCTOR-6" Rietz S.S. 304, 5 HP Van XP
HOMOGENIZER-420 GPH @ 8000 PSI Manton Gaulin Stainless
MILL-2TH Mikro Pulverizer Steel, 15 HP
MILL-SH Mikro Pulverizer Steel, 1 HP
PROCESSOR-10 cu. ft. P.K. V-Type S.S. Jkt. Vac. 550# (3)
PROCESSOR-5 cu. ft. P.K. V-Type S.S. Jkt. Vac. 550#
REACTOR-5 gal. Pfaudler FV & 60 PSI 90 PSI Jkt. 316 S.S.
TANK-10,000 gal. Horizontal, S.S. Clad
TANK-4200 gal. Vertical 304 S.S. 25 PSI UNUSED
TANK-4000 gal. Vertical 304 S.S. 25 PSI UNUSED
VACUUM PUMP-150 CFM @ 25" Nash H-6, 25 HP
VACUUM PUMP-60 CFM @ 1 MM Stokes 149 H-10, 3 HP
VERSATOR-D-8 Cornell S.S. 316 1 HP Van XP

H&P EQUIPMENT CO. INC.
P.O. Box 368 Mayville, N.J. 07045
(201) 335-9770-1-2-3 • TELEX 136157

NEW ACQUISITIONS

700 gal. Readco jktd. Sigma mixer, 400 HP
2 cu. ft. PK SS Twin Shell w/bar
23 cu. ft. SS Day double ribbon, 7½ HP
13"x28" 316 SS Bird Solid Bowl Centrif.
3TH Mikro Pulverizer 30 HP
STB-100 Aeromatic SS Fluid Bed Dryer
300 gal. Pfaudler G/L 23/90 psi, 3TW
Unused 70 cu. ft. Titanium dble cone vac Dryer
100 gal. DeDietrich G/L reactor, 25/90 psi mech. seal, 2HP
SS Ht. Exch.; 246, 200, 123, 56, sq. ft.
10 gal. S-P Dispersion jktd., vac., 20 HP
7 gal. S-P Dispersion jktd., ram, 26 HP
2½ gal. Day SS Sigma jktd., vac., 10 HP
.75 gal. Read 316 SS Sigma jktd., vac. 1 HP
SS Littleford mixers w/choppers
FKM 2000 D, 1200 D, 600 D, 300 D, (5)
SS Twin Shell 40, 30, 20, 5 cu. ft.

REACTORS

2000, 1000, 750, 300 gal. G/L, mech. seals (7)
3000 gal. 316 SS 100/150 psi vari. agit.
3000 gal, 304 SS, 25/125 psi, ½ pipe coil jktd., agit New 1974
2000 gal. 316 SS, 75/150 psi, agit.
1000 gal, 316 SS, 30 & FV/150 psi, agit.
500 gal., 316 SS, 75 & FV/70 psi, agit
24 more in stock from 10 to 300 gals., 304 & 316 SS. Call Now.

SS BLENDERS

69 cu. ft. SS Patt. cone, w/liquid bar
Ribbon/Paddle: 650, 200, 120, 70, 40, 23 cu. ft. (26)
Conical: 520, 200, 150, 130, 100, 75, 69, 40, 30, 20, 10, 5, 2 cu. ft. (16)
Twin Shell: 200, 100, 75, 40, 30, 20, 5 cu. ft. some with intensifiers (12)

MIXERS

Double Arm: 1000, 500, 300, 200, 150, 10, 7, 2½, .75 gal. Sigma, jktd.
Pony: 125, 75, 100, 80, 60, 50 gal. (12)
Planetary: 100, 65, gal. vacuum
Dispersers: 75, 50, 40, 25, 20 15 HP (6)
Littleford: FKM 2000D, FKM 600D, FKM 300 D, FKM 130D, jktd. & choppers (4)

MISCELLANEOUS

Vac. Pumps: NASH: CL 2003, CL 1003, AT 2004, L6, MD 674 KINNEY: KDH 150, KD 30, KS 27, Stokes: 212 H 10.
Tablet Presses: STOKES, MANESTY, COLTON, All Sizes

FILTERS

42" Shriver poly, 50 ch., 4 eye
45" poly chambers, 1½" cake, 4 eye (150)
SS filter presses: 18", 18", 18", 12" (7)
Sparklers: 33S9, 18D10, S-6

CENTRIFUGES

48"x30", 40"x24", 316 SS auto-batch
40", 30", 26", basket, SS & R/L avail.
P5000, P3400, P3000, P2000, Sharples
40"x60", 24"x60", 18"x28", 6" Bird
DeLaval: NX 207, BRPX 207
Westphalia: SAMN 5035, SA 1435-076
HS36, HS24, SS, S16 SS S-P "Ter Meer"

MILLS/PULVERIZERS

Chilsonator system, all SS, 4LX10D
Fitzmills: F20, FS, D6 (6)
Mikro: 4TH, 3TH, 2DH, 2SCS, 1SH, 6MA
3-Roll Mills: 16"x40" to 4"x8" (9)
Ball & Pebble: 6'x12' to 2'x2' (12)
Colloid: 50, 25, 15, 10, 5, 1HP
Raymond: 5057, 5047, 4237, 3036

DRYERS/EVAPORATORS

Wiped film: 173, 57, 25, 21.6, 12 sq. ft.
Belt Flakers: 48"x64', 48"x45', 20"x20'
Con. Vac.: 500, 100, 50, 40, 10, 2.6 c.f.
Rotary Vac.: 130, 40, 20, 10 cu. ft.
S.S. Fluid Bed: 100 kg, 60 kg, 30 kg, S.S.
Double Drum: 12"x18", 5"x6", S.S.
Flakers: 6'x5', 3'x6'6", drum
Rotary: 5'x70' to 2'x14' (12)

GEM George Equipment & Machinery Co.
135 Manchester Place, Newark, N.J. 07104
Tel. (201) 481-0900 Telex No. 138944

CMR MARKETPLACE

CHEMICAL MARKETING REPORTER'S CLASSIFIED ADVERTISING SECTION

COPY DEADLINE: Wednesday Noon preceding date of publication.

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BUSINESS OPPORTUNITIES

Seeking Broker for dyestuffs and intermediates. Rapidly growing Dyes & Chemical Company. Contact: P.O. Box 298, Huntington, N.Y. 11743.

CHEMICALS OFFERED

40,000 pounds bulk Glycerine 84% synthetic (yellow). Has burnt odor from distillation. Available every 6 weeks. 72c. per pound, f.o.b. Mississippi. Also available 30,000 pounds Phenacetin USP, made by Monsanto, 60 mesh coarse/granular. Contact CMR Box 716.

CHEMICALS WANTED

Active Buyer of surplus chemicals, pigments, dyes, resins, waxes, plastics etc. Call toll free 1-800-631-3337 or 617-829-8736. Oser Polymer Corp. Chemical Div. 17 Industrial Drive, Holden, MA 01520.

All Surplus — Chemicals — Resins — Oils — Colors Solvents — Plasticizers — Specialties — Intermediates — bought by: Rambach Chemical Co., Inc. 52 Vesey Street, PO Box 5167, Newark, NJ 07105. Phone: (201) 589-7774.

Cash For your surplus chemicals, resins, colors, pharmaceuticals, dyes, other raw materials, by products, wastes, residues and off-spec materials. Morgan Chemicals Inc., 5500 Main Street, Williamsville, NY 04221 (716) 632-4000; Telex 918133.

Realize Top Value from the sale of your surplus Chemicals. We buy surplus Chemicals, Plastics, Resins, Waxes, etc. Bonmar Chemical Co., P.O. Box 484, Fair Lawn, NJ 07410. Phone: (201) 791-2448; Telex: 13-0434.

Resyn Corp. will buy your surplus chemicals, resins and resin raw materials — prime or off-specification. Resyn Corp. P.O. Box 63, 1540 W. Blancke St., Linden, NJ 07036. (201) 862-8767.

Surplus Chemicals: Wanted, high prices paid-for-surplus chemicals, resins, pharmaceuticals, colors, plasticizers, solvents, waxes, etc. Prompt and efficient service. Try us for better prices. Chemsales Inc., 107-27 180th Street, Jamaica, N.Y. 11433. (718) 658-0400-01.

Surplus Wanted: Chemicals, pharmaceuticals, dyes, solvents, pigments, waxes, other raw materials. Over 55 years service Chemical Service Div., P.O. Box 846, 97-05 Ongley St., Rockville Centre, NY 11571. (516) 536-5533.

We Buy Surplus chemicals, colors, resins, solvents, plasticizers by-products, etc. Over 50 years of service to industry. Eastern Color & Chemical Co., Inc. 65 Roosevelt Ave., Dept. C P.O. Box 1029, Valley Stream, N.Y. 11582. (516) 781-4445.

Your Surplus is our inventory. We buy all chemicals, pigments, resins, solvents, plasticizers and pharmaceuticals. Prompt inspection and cash terms on each offering. Pyramid Chemical Sales Co., 1035 Virginia Drive, Fort Washington, PA 19034. (215) 542-9292.

EQUIPMENT OFFERED

Cumberland Chopper 50 hp. Mitts & Merrill "Hogger" 100 Hp. 100 gal. glass lined reactor. Pfaudler. S.S. jacketed vessels, 100-500 gals. Durion 3X1½-5 HP. pump. 500-7000 gallon S.S. tanks. Gaulin hi pressure pumps. Lester Kehoe Machinery Corporation, 2581 Richmond Terrace, Staten Island, NY 10303. (718) 447-3410, Telex: Drury 423466.

Oilsmeller has used process equipment for sale: Columns, Exchangers, Heaters, Reactors, Pressure Vessels, Tanks, etc. Midwest Steel Co., Inc. 9825 Moers Road Houston, Texas 77075. 713/991-7843.

Free: Three 15,000 gal. mild steel vertical tanks twelve feet diameter in good condition, held methanol in Northeast Philadelphia area. Contact Ruth Duncan 215/244-0900 — Nationwide Industries, Bensalem, PA 19020.

Ribbon Blenders for sale. Many sizes in stock. Remanufactured and guaranteed. All sizes available. Stainless Steel and Steel construction. We quote Tom Williams Co. 9503 Fremont, KC. Mo. 64134 816-761-4264.

Spray Dryers for Sale: 2 Niro Spray Dryers, Model 120 complete with drives, centrifugal atomizers, recording instruments. Both units excellent condition. Contact Ann Rolow, Kemin Industries, Box 70, Des Moines, Iowa 50301, 515/266-2111.

Tanks For Sale: Blue Glass & Epoxy Lined Tanks up to 37,000 gal. ea. from Milwaukee and Detroit. Sacrifice price) Free list: Brewery Works, Box 1467, Milwaukee, WI 53201-1467, (414) 272-1702.

EQUIPMENT WANTED

Stokes 2-Stage Vacuum system Model 1722, 1) Stokes MDL 412-11 Microvac Pump, 300 CFM-10 HP. 2). Roots high vacuum booster 615 RGS, 1650 CFM, 10 hp Blower. We also are looking for a Philadelphia worm gear reducer-1000 MDA, Input 1700/50, Output 8.78/.256, Ratio 165-1. Louisiana Chemical Equipment, Al Rotenberg, (504) 923-3602. Box 65064 Baton Rouge, LA 70896.

POSITIONS OFFERED

Chemical Sales aggressive chemical distributor currently has high potential sales position available in northern N.J. Minimum 2-3 yrs. chemical sales experience with good customer following, familiarity with reagent and technical sales required. We offer competitive compensation—terrific opportunity. Send resume to Box CMR-721.

NYC based International Petrochemical Corp. seeks bright, reliable person for entry level position in Purchasing Dept. College degree required; foreign languages a plus. Send resume & salary requirements to Box CMR-720.

"Sales manager position offered to the right person knowledgeable in sales of C & R. 2-5 years sales experience essential. Position requires 10-40 percent travel (eastcoast). We offer salary and commission on your sales. Please submit a full resume of job history and qualifications to Box CMR 722."

SERVICES OFFERED

Custom solids packaging and distribution in the port of Mobile. Multi-wall bags, bulk bags, drums and bulk. Screening, repackaging and warehousing. Rail and truck facilities. Contact: Philip Hahn, SEAPAC, Bldg. 14A, Brookley Complex, Mobile, AL 36615. 205/433-3541.

Owens-Corning

Continued from Page 7

meeting will be held October 9 to vote on the proposed recapitalization plan.

Mr. Boeschenstein said the recapitalization plan "requires that the company rationalize its businesses and redirect its corporate strategy to focus the company on its cash generating, core businesses. He said management will immediately begin restructuring the company with an eye towards maximizing cash flow, "substantially and promptly reduce costs, eliminate businesses that do not meet our return on investment criteria, and raise cash through the sale of certain assets."

He said the restructuring will leave OCF more streamlined, "with a core of successful and profitable businesses." He said the plan also "represents a major change in corporate strategy in what we will manage for cash flow rather than actively making major investments in potential future growth areas."

He further stated that "the board believes that the company's management — rather than an outsider unfamiliar with our organization and its businesses — is most qualified to deliver to stockholder the full values inherent in the company."

To that end, the recapitalization plan calls for 150 members of management to purchase 1 million shares of the new common stock. Mr. Boeschenstein in his statement added, "as a future incentive to those members of management they will be entitled to receive an additional 1.5 million restricted shares," and an option to buy another 1.5 million shares. This roughly equals 10 percent of the total outstanding shares of the recapitalized company.

CHEMICAL IMPORTS

Continued from Page 43

INOSITOL Meadows Wye 20 dms (9 lbs) (Sea Land Voyager) Bremerhaven, 7/24.
INOSITOL NF REGULAR POWDER Fallek Chemical 20 dms (2425 lbs) (Ming Moon) Yokohama, 7/23.
ION EXCHANGE RESIN Sybron 880 bgs (87174 lbs) (Ming Moon) Kobe, 7/23.
IOPANOIC ACID Sterling 7 dms (648 lbs) (Dart Atlantica) Felixstowe, 7/29.
IRON CHLORIDE Order 13 dms (1512 lbs) (Stuttgart Express) Bremerhaven, 7/22.
IRON OXIDE Charles Kurz 18 plt (40691 lbs) (Ever Great) Antwerp, 7/10.
Launders Segal Color 850 bgs (43475 lbs) (American Condor) Rotterdam, 7/21.
Trans World Shpg 720 bgs (40454 lbs) (Ever Living) Felixstowe, 7/21.
IRON SULPHATE George Uhe 183 dms (45241 lbs) (Ever Great) Hamburg, 7/10.
IRON THEOPHYLLINE ANHYDROUS Janel Intl Fwdrs 200 dms (13977 lbs) (Sing He) Shanghai, 7/19.
ISOBUTYL BROMIDE American Import Service 13 dms (7368 lbs) (American Ohio) Rotterdam, 8/1.
ISOBUTYRIC ACID ICT Consultants 1 con (40785 lbs) (Ever Great) Rotterdam, 7/10.
ISONONANOIC ACID Order 156 cek (72587 lbs) (Ever Living) Rotterdam, 7/21.
ISOPHTHALIC ACID Reichhold Chemicals 20 bbg (40785 lbs) (Al Wattyah) Genoa, 7/21.
Ssel 2100 bgs (118981 lbs) (Ever Shine) Leghorn, 8/8.
ISOPHYTOL Order 1 tnk (35758 lbs) (Atlantic Star) Rotterdam, 7/16.
1 tnk (35759 lbs) (Atlantic Star) Rotterdam, 7/18.
1 tnk (35759 lbs) (Atlantic Service) Rotterdam, 7/23.
ISOPROPANOL Penelpina 139 ctn (2381 lbs) (Heide) Hamburg, 7/25.
ISOPROPYL ALCOHOL Chemfleet Chemical 2 bks (4409286 lbs) (Golar Petrosea) Rotterdam, 7/22.
Shell Oil 12 pkg (4666 lbs) (Atlantic Conveyor) Liverpool, 7/21.
ISOPROPYL BENZENE Order 1 bks (23027 lbs) Jo Sirk) Rotterdam, 7/16.
ISOPROPYL ETHER Kloeckner Chemical 1 bks (611377 lbs) (Golar Petrosea) Rotterdam, 7/22.
ITACONIC ACID Rhone Poulenc 1440 cs (82278 lbs) (Dragor Maersk) Marseille, 7/16.
JELUTONG GUMS NOS L A Dreyfus 36 plt (00587 lbs) (Ever Great) Singapore, 7/10.

L-M

L ARGININE FREE BASE Kyowa Hakko 50 dms (7407 lbs) (Leda Maersk) Kobe, 7/18.
L CYSTEINE DISODIUM SALT MONOHYD Angel Products 2 dms (243 lbs) (Louis Maersk) Tokyo, 7/24.
L EPHEDRINE Ganes Chemicals 40 ctn (2531 lbs) (American Illinois) Hong Kong, 7/21.
L ISOLEUCINE L VALINE Kyowa Hakko 4 dms (484 lbs) (Louis Maersk) Kobe, 7/24.
L TRYPTOPHAN Kuehne & Nagel 20 dms (2557 lbs) (Oriental Minister) Yokohama, 7/22.
Showa Denko America 40 dms (5115 lbs) (Oriental Minister) Kobe, 7/22.
LACTOSE Generichem 288 dms (27302 lbs) (Ever Living) Rotterdam, 7/21.
LAMPONG BLACK PEPPER ASTA Ludwig Mueller 420 bgs (68114 lbs) (Ever Linking) Singapore, 7/20.
LEAD FLUORIDE ARSENIC United Mineral & Chemical 23 ctn (1027 lbs) (Louis Maersk) Tokyo, 7/24.
LEAD SUBACETATE Rohde & Liesenfeld 40 dms (4021 lbs) (Stuttgart Express) Hamburg, 7/22.
MERCURY METAL Chi Mei Metals 100 cs [illegible] lbs) (American Illinois) Hong Kong, 7/21.
META CHLOROANILINE Order 20 dms (11093 lbs) (Dart Continent) Felixstowe, 7/22.
METHACRYLAMIDE Rohm & Haas 600 bgs (44022 lbs) (Sea Land Voyager) Rotterdam, 7/24.
METHALLYL CHLORIDE Stolt Tank Containers 2 tnk (71495 lbs) (Ming Moon) Kobe, 7/23.
METHANOL Order of Shipper 1 bks (8610 lbs) (Jo Birk) Rotterdam, 7/18.
METHOCARBAMOL SCC 140 dms (4782 lbs) (Atlantic Conveyor) Liverpool, 7/21.
METHYL 12 HYDROXYSTEARATE Order of Shipper 2 tnk (80389 lbs) (American Michigan) Santos, 7/28.
METHYL ATRATATE AROMATIC PRODUCT Order 80 dms (9824 lbs) (Zim Montreal) Haifa, 7/20.
METHYL CARBONATE Page & Jonas 00 dms (38876 lbs) (Sea Land Voyager) Bremerhaven, 7/24.
METHYL CELLULOSE Mitrans 300 dms (37037 lbs) (Ming Moon) Yokohama, 7/23.
METHYL CYANOACETATE Samo Shpg 25 dms (12401 lbs) (Ming Moon) Kobe, 7/23.
METHYL ETHYL KETONE Chemfleet Chemical 1 bks (2220052 lbs) (Golar Petrosea) Rotterdam, 7/22.
Kloeckner Chemical 1 bks (1146333 lbs) (Golar Petrosea) Rotterdam, 7/22.
METHYL ETHYL KETOXIME John Weidner 76 dms (32759 lbs) (Alexandra) Rotterdam, 7/18.
METHYL HEPTADIENONE Order 1 dms (132 lbs) (Leda Maersk) Tokyo, 7/18.
METHYL METHACRYLATE Surface Air Intl 1 tnk (36506 lbs) (Ever Great) Felixstowe, 7/10.
METHYL METHACRYLATE MONOMER Order 2 tnk (78432 lbs) (Ever Great) Felixstowe, 7/10.
1 tnk (39551 lbs) (Ever Living) Felixstowe, 7/21.
METHYL PARABEN NF Total Port Clearance 118 trw (13788 lbs) (Zim Genova) Haifa, 7/8.
METHYL SALICILATE Felton Intl 182 dms (87788 lbs) (Bazias 8) Constanza, 7/26.
METHYL TERTIARY BUTYL ETHER Order of Shipper 1 bks (6812613 lbs) (Stolt Span) Aratu, 7/26.
METHYLCARBAMOL Scanfreight 43 dms (4222 lbs) (Atlantic Conveyor) Gothenburg, 7/21.
METHYLCARBAMOL Scanfreight 43 dms (4222 lbs) (Atlantic Conveyor) Gothenburg, 7/21.
METHYLENE BIS CHLOROANILINE Palmer Davis Seika 280 dms (35781 lbs) (Ming Moon) Kobe, 7/23.
METHYLENE PHENYLENOIISOCYANATE Rekortsa Sports 78 brl (28543 lbs) (Ever Living) Antwerp, 7/21.
METHYLENE PHENYLEROIISOCYANATE Rekortan Sports 36 brl (16049 lbs) (Ever Living) Antwerp, 7/21.
METHYLPENTENE POLYMERS Mitsui 40 plt (45415 lbs) (Leda Maersk) Kobe, 7/18.
METHYMETHACRYLATE MONOMER Degussa 2 tnk (80754 lbs) (Stuttgart Express) Bremerhaven, 7/22.

LOW DENSITY POLYETHYLENE Allied Paper Products 2340000 pcs (35124 lbs) (American Lancer) Santos, 7/17.
MAGNESIA CARBON BRICK K & M Custom Brokers 2884 pcs (74544 lbs) (Ming Moon) Kobe, 7/23.
MAGNESITE F W Myers 169 bls (7293 lbs) (Atlantic Service) Rotterdam, 7/23.
MAGNESIUM ACETATE 4 HYDRATE Order 32 dms (3728 lbs) (Stuttgart Express) Bremerhaven, 7/22.
MAGNESIUM CARBONATE JGR Resources 25 bgs (2227 lbs) (Ever Living) Hamburg, 7/21.
MAGNESIUM CHLORIDE Potash Import & Chemical 420 bgs (42278 lbs) (Dart Continent) Bremerhaven, 7/22.
MAGNESIUM NITRATE K Chemical 828 bgs (46718 lbs) (Zim Montreal) Haifa, 7/29.
MAGNESIUM OXIDE Desmo Chemical 880 bgs (38228 lbs) (Ming Moon) Kobe, 7/23.
MAGNESIUM SULFATE HEPTAHYDRATE A ACS Chemical Ind 40 dms (4782 lbs) (Kiso Maru) Kobe, 7/15.
MAGNESIUM TRISILICATE Robeco Chemicals 20 bgs (1116 lbs) (Atlantic Star) Rotterdam, 7/18.

N-O

N BUTYL METHACRYLATE MONOMER Order 1 tnk (40212 lbs) (Nedlloyd Rouen) Bremerhaven, 7/22.
N CAPROIC ACID HARMLESS Wacker Chemicals 10 brl (4408 lbs) (TFL Jefferson) Bremerhaven, 7/21.
NALIDIXIC ACID Sterling 22 dms (2578 lbs) (Dart Atlantica) Felixstowe, 7/26.
NAPHTHOL Penson 40D dms (26015 lbs) (Sing He) Shanghai, 7/18.
NAPHTHOQUINONE SULF CL NA SALT Order 280 dms (15256 lbs) (Louis Maersk) Kobe, 7/24.
NICKEL SULFATE Atrimet Indusse 840 bgs (43342 lbs) (Ever Living) Antwerp, 7/21.
NICOTINAMIDE Vitache Reilly Tar 20 bbg (39110 lbs) (Stuttgart Express) Antwerp, 7/22.
NICOTINAMIDE Vitachem 800 bgs (44821 lbs) (Dart Continent) Antwerp, 7/22.
NICOTINAMIDE FEEDGRADE Vitachem 600 bgs (44621 lbs) (Dart Continent) Antwerp, 7/22.
NITRIC ACID M G Transport Warehouse 18 bxs (606 lbs) (Woensdrecht) Hamburg, 7/25.
NITROANILINE POISON B Leschaco 152 cak (38467 lbs) (Stuttgart Express) Rotterdam, 7/22.
NITROCELLULOSE IND Fayette Chemical 112 dms (40828 lbs) (Zim Genova) Barcelona, 7/8.
NITROCELLULOSE WET ALCOHOL Fayette Chemical 125 dms (41888 lbs) (Sea Land Voyager) Bremerhaven, 7/24.
ORTHO XYLENE Order 1 bke (1757280 lbs) (Bow Hunter) Rotterdam, 7/31.
Silvey Shpg 1 bks (4398329 lbs) (Golar Petrosea) Rotterdam, 7/22.
OSSEIN Order 3405 bbs (307527 lbs) (Al Wattyah) Jebel Ali, 7/21.
OXALIC ACID E J Esposito 772 bgs (39145 lbs) (Bing He) Shanghai, 7/18.
OXYACETANILIDEMOIST Order 118 dms (17189 lbs) (Stuttgart Express) Antwerp, 7/22.
OXYNITROPHENYLARSENIOUE Rhono Poulenc 200 dms (24471 lbs) (Nedlloyd Rochester) LeHavre, 7/15
OXYTETRACYCLINE HYDROCHLORIDE Holm New York Chemical 40 kgs (4702 lbs) (Hrvatska) Rijeka, 7/10.

P-Z

P ACETANISIDINE Penson 200 dms (26133 lbs) (American Illinois) Kobe, 7/21.
PENICILLIN Novo Laboratories 201 dms (13071 lbs) (Atlantic Conveyor) Gothenburg, 7/21.
PENICILLIN G SODIUM Daniel F Young 1 con (5509 lbs) (Oleander) Hamilton, 7/17.
PERCHLORIC ACID M G Transport Warehouse 1 bxs (68 lbs) (Woensdrecht) Hamburg, 7/28.
PERI ACID POWDER Orlex Chemical 405 dms (53125 lbs) (Oriental Minister) Hong Kong, 7/22.
3080 cs (120000 lbs) (American Ohio) Rotterdam, 8/1.
PETROLEUM RESIN QUINTONE R 100 Mitsui 8810 bgs (338002 lbs) (Ming Moon) Kobe, 7/23.
PHENYL METHYL PYRAZOLONE ORLEX Silver Shpg 170 dms (23261 lbs) (Heide) Hamburg, 7/25.
PHENYLACETIC ACID NON HAZARDOUS IMC 800 dms (35847 lbs) (Nedlloyd Rochester) LeHavre, 7/15.
PHENYLPROPANOLAMINE DL CALCIUM P Mitrans 750 mix (44146 lbs) (Bing He) Kobe, 7/19.
PHOSPHORESCENT PIGMENT GRADE Hartrodt Schmidt 28 dms (2610 lbs) (Stuttgart Express) Hamburg, 7/22.
PHOSPHORESCENT PIGMENTS United Mineral & Chemical 20 dms (4233 lbs) (Louis Maersk) Tokyo, 7/24.
PHOSPHORIC ANHYDRIDE Order 595 dms (40928 lbs) (Ever Superb) Fos, 7/18.
PHOSPHOROUS PENTOXIDE M G Transport Warehouse 4 bxs (86 lbs) (Woensdrecht) Hamburg, 7/25.
POLYBUTENE S P Oil 78 dms (32328 lbs) (Nedlloyd Express) Marseille, 7/22.
POLYBUTENE NAPTEL S P Oil 78 dms (32328 lbs) (Nedlloyd Express) Marseille, 7/22.
B P Performance Polymers 312 dms (129316 lbs) (Dragor Maersk) Marseille, 7/16.
POLYGLYCOL MELAMIN HARMLESS Harris Brown 2 pcl (784 lbs) (TFL Jefferson) Bremerhaven, 7/21.
POLYMERIZED DEHYDRATED CASTOR OIL Order of Shipper 76 dms (33704 lbs) (Natuno) Santos, 7/9.
POLYTETRAFLUOROETHYLENE Heemsoth Kerner 179 dms (22089 lbs) (Kiso Maru) Tokyo, 7/15.
POLYTETRAFLUOROETHYLENE DAIKIN P Sumitomo of America 420 dms (12963 lbs) (Oriental Minister) Kobe, 7/22.
POLYVINYL ALCOHOL Marubeni America 840 bgs (40643 lbs) (Leda Maersk) Kobe, 7/18.
Mitsui 330 bgs (14870 lbs) (Leda Maersk) Kobe, 7/18.
POLYVINYL CHLORIDE PEVIKON Tarkett 769 bgs (434 lbs) (Ever Great) Hamburg, 7/10.
POLYVINYLCHLORIDE SLOVIC Mortell 1200 bgs (67196 lbs) (Ever Great) Antwerp, 7/10.
POTASSIUM HYDROXIDE Autotype 7 cs (4087 lbs) (Atlantic Compass) Liverpool, 7/7.
Mallinckrodt 343 dms (40000 lbs) (Atlantic Compass) Gothenburg, 7/7.
343 dms (40000 lbs) (Atlantic Conveyor) Gothenburg, 7/21.
POTASSIUM HYDROXIDE 6884 Mallinckrodt 160 dms (0 lbs) (Sea Land Voyager) Bremerhaven, 7/24.
POTASSIUM IODIDE Ampak 44 dms (4645 lbs) (Al Wattyah) Dubai, 7/21.
PROCAINE PENICILLIN Order 380 dms (44921 lbs) (Ever Great) Hamburg, 7/10.
PROGRESSO OLIVE OIL Progresso Quality Foods 900 ctn (46627 lbs) (Almudena) Valencia, 7/25.
PROMETHAZINE HYDROCHLORIDE Rhone Poulenc 36 dms (2236 lbs) (Atlantic Star) LeHavre, 7/18.
PROPYL PARABEN NF Total Port Clearance 64 trw (7478 lbs) (Zim Genova) Haifa, 7/8.
PROPYLENE DICHLORIDE Leschaco 1 con (44842 lbs) (Ever Great) Rotterdam, 7/10.
Philip Villedrouin 2900 crt (70328 lbs) (Sea Land Leader) Algeciras, 7/22.

PVC Ferrero 603 crt (19689 lbs) (Dragor Maersk) Genoa, 7/18.
PVC COMPOUND Dynamit Nobel 20 ctn (48868 lbs) (Ever Living) Antwerp, 7/21.
Inland Imports 40 bxs (86979 lbs) (Alexandra) Bremen, 7/18.
PVC COPOLYMER RESIN Emco Chemical 1050 bgs (47115 lbs) (Ming Moon) Kobe, 7/23.
PVC EMULSION RESIN EPISOL POWDER ICC Ind 784 bgs (44074 lbs) (Zim Genova) Haifa, 7/8.
PVC RESINS Gilbert & Bennet Mfg 1800 bgs (101588 lbs) (Ever Superb) Genoa, 7/19.
PYRAZOLIC ACID SULFOPHENYL METHY Order 81 dms (7518 lbs) (Ming Moon) Kobe, 7/23.
PYRIDINIUM BROMIDE Ameribrom 1 dms (245 lbs) (Export Freedom) Haifa, 7/18.
PYRIDOXINE HYDROCHLORIDE Takeda 130 dms (8488 lbs) (Kiso Maru) Kobe, 7/15.
QUEBRACHO EXTRACT BLOCK Barkey Intl 384 bgs (39663 lbs) (San Martin I) Buenos Aires, 7/18.
QUINIZARINE TECHNICAL Janel Intl Fwdrs 43 dms (21588 lbs) (Stuttgart Express) Antwerp, 7/22.
REX OXIDE VIO 800 BGS (40234 lbs) (Al Wattyah) Valencia, 7/21.
SODIUM BICARBONATE Vitusa Products 1580 bgs (161438 lbs) (Ever Living) Antwerp, 7/21.
SODIUM BROMATE Ameribrom 4 con 8 t 57496 lbs) (Export Freedom) Haifa, 7/18.
SODIUM CASEINATE De Zaan 800 bgs (44771 lbs) (Ever Living) Rotterdam, 7/21.
SODIUM CITRATE DIHYDRATE Order 1800 bgs (164804 lbs) (Ever Living) Antwerp, 7/21.
SODIUM DICHLORO ISOCYANURATE Order 256 dms (67725 lbs) (Ming Moon) Kobe, 7/23.
SODIUM ERYTHORBATE PMP Fermentation Products 480 dms (38095 lbs) (Ming Moon) Kobe, 7/23.
SODIUM FERROCYANIDE Degussa 2160 bgs (118571 lbs) (Stuttgart Express) Antwerp, 7/22.
SODIUM FORMALDEHYDE Atlas Intermodal Transport 440 dms (78585 lbs) (Ming Moon) Kaohsiung, 7/23.
SODIUM GLUCONATE Akzo Chemie 770 bgs (39010 lbs) (Ever Living) Rotterdam, 7/21.
PMP Fermentation Products 1115 bgs (0 lbs) (Ming Moon) Kobe, 7/23.
SODIUM HYDROXIDE Mallinckrodt 343 dms (40000 lbs) (Atlantic Compass) Gothenburg, 7/7.
343 dms (40000 lbs) (Atlantic Conveyor) Gothenburg, 7/21.
338 dms (39185 lbs) (Dart Atlantica) Bremerhaven, 7/28.
SODIUM HYPOPHOSPHITE 1 HYDRATE Order 5 dms (582 lbs) (Stuttgart Express) Bremerhaven, 7/22.
SODIUM LAURYL SULFATE J J Gavin 812 bgs (23583 lbs) (Kiso Maru) Kobe, 7/15.
SODIUM LAURYL SULFATE USP Continental Chemical 875 bgs (38546 lbs) (Ever Linking) Keelung, 7/20.
SODIUM METAPERIODATE Robeco Chemical 5 dms (573 lbs) (Dart Continent) Felixstowe, 7/22.
SODIUM PERBORATE MONOHYDRATE Degussa 540 bgs (41098 lbs) (Stuttgart Express) Hamburg, 7/22.
SODIUM SILICATE SOLUTION Order of Shipper 1 bks (1203403 lbs) (Jo Birk) Rotterdam, 7/18.
SODIUM SIUCO FLUORIDE Atlas Intermodal Transport 450 bgs (39782 lbs) (Ming Moon) Kaohsiung, 7/23
SODIUM TRIPOLYPHOSPHATE Economics Lab Exports 40 bbg (89110 lbs) (Al Wattyah) Leghorn, 7/21.
SORANE RESIN Knapp King Size 320 dms (19841 lbs) (Woensdrecht) Zeebrugge, 7/25.
Weinbrenner Shoe 97 mix (23618 lbs) (American Ohio) Felixstowe, 8/1.
STANNOUS OCTOATE Sattva Chemicals 21 dms (12638 lbs) (American Lancer) Buenos Aires, 7/17.

STEARIC ACID CANDLE WICK & ETC Kameyama 1 cs (2939 lbs) (Kiso Maru) Nagoya, 7/15.
STEERING GEAR SYNTHETIC RESIN RO Interoceanica Agency 1 plt (0 lbs) (Sea Land Voyager) Bremerhaven, 7/24.
SULFADIMIDINE SODIUM Order 200 dms (22046 lbs) (Hreljin) Rijeka, 7/18.
SULFAMETHOXAZOLE Shionogi 84 dms (10186 lbs) (Leda Maersk) Kobe, 7/18.
SULFAMIC ACID Atlas Intermodal Transport 800 bgs (45269 lbs) (Ming Moon) Keelung, 7/23.
NPS Intl 770 bgs (39846 lbs) (Kiso Maru) Kobe, 7/15.
SULFAQUINOXALINE Richard Boas 40 dms (2734 lbs) (Stuttgart Express) Hamburg, 7/22.
SULFONIC ACID Universal Transcontinental 400 bgs (23104 lbs) (Ming Moon) Kobe, 7/23.
TALC Coastal Beverage 810 bgs (45238 lbs) (Dragor Maersk) Marseille, 7/16.
TARTARIC ACID GRANULAR & POWDER Joseph C Murray 432 bgs (44803 lbs) (Export Freedom) Barcelona, 7/18.
TERPENE OIL Shaw Mudge 1 dms (441 lbs) (American Michigan) Santos, 7/25.
TERPINOLENO Roehlig Fwdg 32 dms (0 lbs) (Export Freedom) Barcelona, 7/18.
TETRACHLORO P BENZOQUINONE Mitrans 30 dms (11442 lbs) (Oriental Minister) Kobe, 7/22.
TETRAHYDROFURAN Koegel Overseas 258 pcs (44407 lbs) (Stuttgart Express) Antwerp, 7/22.
TETRAISOBUTYLDIALUMINOXANE Rohde & Liesenfeld 1 hob (11 lbs) (Ever Great) Hamburg, 7/10.
THIAMINE HCL Amalgamated Metals 25 dms (0 lbs) (Oriental Minister) Hong Kong, 7/22.
THIAMINE HYDROCHLORIDE Takeda 120 dms (3988 lbs) (Kiso Maru) Kobe, 7/15.
THIAMINE MONONITRATE Amalgamated Metals 75 dms (0 lbs) (Oriental Minister) Hong Kong, 7/22.
TOLUENE DIISOCYANATE TEDIMON Montedison 66 dms (39431 lbs) (Export Freedom) Leghorn, 7/19.
TRAGACANTH GUM Tio Gums 40 bgs (4497 lbs) (Schackenborg) Istanbul, 7/17.
TRICHLOROACETIC ACID Order 150 dms (18158 lbs) (Stuttgart Express) Bremerhaven, 7/22.
TRIETHYLALUMINIUM Sherex 1 can (128 lbs) (Ever Living) Hamburg, 7/21.
TRIETHYLAMINE Order 78 dms (27728 lbs) (Ever Superb) Fos, 7/18.
TRIMETHYL CYCLOHEXANONE Accelerated Shpg 30 pkg (13294 lbs) (Atlantic Compass) Liverpool, 7/7.
TRIMETHYL CYCLOHEXENYL METHYLBUT Order 79 dms (34484 lbs) (Atlantic Saga) LeHavre, 7/8.
TRIMETHYLCHLOROSILANE Dow Corning 78 dms (30953 lbs) (Atlantic Conveyor) Liverpool, 7/21.
TRIMETHYLOL PROPANE Browning Chemical 850 bgs (44092 lbs) (Al Wattyah) Genoa, 7/21.
TRIMETHLOLPROPANE Leschaco 1 tnk (40887 lbs) (Stuttgart Express) Rotterdam, 7/22.
TRIPHENYL PHOSPHATE Order 840 bgs (36773 lbs) (Atlantic Conveyor) Liverpool, 7/21.
TRISODIUM CITRATE DIHYDRATE Order 398 bgs (44864 lbs) (Ever Living) Antwerp, 7/21.
TURMERIC Order 180 bgs (28113 lbs) (Schackenborg) Pt Limon, 7/17.
Stepan Chemicals 188 bgs (25348 lbs) (Schackenborg) Pt Limon, 7/17.
TURPENTINE GUM Reimer Martens 1 tnk (37235 lbs) (American Michigan) Paranagua, 7/25.
TURPENTINE WATER WHITE Reimer Martens 1 con (38927 lbs) (American Michigan) Santos, 7/25.
ZINC STEARATE New England Resins & Pigment 440 bgs (0 lbs) (Oriental Minister) Kaohsiung, 7/22.
Shawnee Chemical 540 bgs (13007 lbs) (Ever Linking) Keelung, 7/20.

ADVERTISERS' INDEX

CHEMICAL PROFILE

PARAXYLENE

SEPTEMBER 1, 1986

SUPPLY

PRODUCER	CAPACITY*
Amoco, Decatur, Ala.	1,077
Amoco, Texas City, Tex.	1,100
Chavron, Pascagoula, Miss.	500
Exxon, Baytown, Tex.	700
Lyondell, Houston, Tex.	400
Phillips, Guayama, P.R.	470
St. Croia Patrochemical, St. Croia, V.I.	600
Koch, Corpus Christla, Tex.	450
Tannaco, Chalmatta, La.	140
Total	5,437

*Millions of pounds annually. Chevron expanded its cepecity by sbout 170 million pounde per year through dabottlenecking efforts in 1985. Exxon hes elso undergone debottlenecking efforts end improved its capaolty by 200 million pounde per year since 1983. Koch underwent improvements in energy efficiency which produced a 80 million-pound-per-yeer capacity increase in 1985. Profile last published 8/22/83; this revision, 9/1/186.

DEMAND

1985: 4.5 billion pounds; 1988: 4.7 billion pounds; 1990: 5.23 billion pounds.

GROWTH

Historical (1975-1985): 4.1 percant per year; **future:** 3 parcent par yaar through 1990.

PRICE

Historical (1973-1985): High 31c. per pound; bulk, dlvd.; low 6¼c. per pound bulk, frt. aqual.: **Current:** 19½c. par pound, dlvd., contract; spot, 18c. par pound f.o.b.

USES

Dimathyl Teraphthalate and tarephthalic acid for saturated polyaster production, 100 percent (axcept nagligibla emounts) for uea as solvents, coating or pasticides. This includes 75 parcent for domastic coneumption and 25 percent for axport.

STRENGTH

World growth in paraxylena is axpectad to be as high as 4 percent per year. Spot prices, usually for axport matarlel, ara currently firming. US producars hava just complated an across-tha-board ehift to highar purity standards. Orthoxylane and mataxylena contents hava been reduced by 0.1 and 0.4 percent respectively. Ovarall purity standards hava been ralsed from 99 parcant to 99.5 percent minimum p-xylana content. PET resin, a downstreem peraxylana product la growing by about 10 parcent annuelly in the US.

WEAKNESS

Domaetic consumption of paraxylena for polyaetar fiber raw matarlals is stagnant due to increaeed textila production oversaas.

OUTLOOK

Tha world markat la a promising ona for paraxylana. New DMT-TPA facilitlas ovarsaas, particularly in tha Far Eest, are expected to expand demand for US product. Rising demand for PET resins and the expected introduction of the PET 12 oz. "can" and new PET bottle sizes could create a rapidly growing demand for paraxylene.

PLATFORM

LNG Outlook

The following is excerpted from an assessment of the LNG outlook by Malcolm Peebles, director of Shell International Gas Ltd.

The uncertainty surrounding energy prices is not a conducive climate in which to make major investment decisions. Inevitably a wait and see attitude prevails. Thus, if a return to a stronger price regime is delayed for several years, this will almost certainly mean a corresponding delay in LNG project development until better days are here again. But such delays would not be confined to LNG projects and would embrace the majority of capital intensive energy projects. The evidence for this is already with us, with the growing numbers of cancellations and postponements announced each month around tha world.

Meanwhile, a continuing period of low energy prices is likely to stimulate energy demand with the possible consequence that forecasts of supply/demand deficits are likely to come forward rather than slip back in time.

Time For Innovation

I would hope that while we are all waiting for these upturns in demand and in pricea to occur, the LNG induatry will not sit idly by. This breathing space, if that la what it is, in project implementation can be put to good purposes. It is time for innovative thinking and planning: a time to examine new ways to reduce unit costs, to investigate the technical and economic scope for smaller scale projects, to explore new and cost-effective techniquea, to study new ways of project financing, to review contractual and operational terms and conditions — the list of useful taaks to be undertaken is almost endless.

Moreover, these tasks are not confined to the sellers' side, as buyera will need to give thought to how they can give some price and offtake security to sellers to ensure the timely development of new projects.

Successful work along these lines will put the LNG industry in good shape to press on quickly and rigorously the moment the economic climate for LNG starts to improve. In fact, time is not on our side as one can be almost certain that LNG'a competitora will be doing much the same thing as they gear themselves for a return to more normal trading conditions.

I think that the realities of the past few years have shown that none of us has been very successful at forecasting the futuro. The recent Soviet nuclear powar accident has provided a tragic reminder that we live in an uncertain and unpredictable world. It is too early to assess the long term effect of that particular incident, but it does highlight the point of future uncertainty I referred earlier to a window of opportunity in Western Europe. I think the keynote for the future in all markets of interest is a readiness to seize opportunities wherever and whenever they occur, and this requires a continuing effort from potential buyers as well as from potential sellers. Indeed existing and prospective buyers of LNG would be well advised to ensure that they cherish and safeguard their supplies so as to be well-placed when the inevitable upturn in energy demand occurs with its consequential pressures on supply.

During the 1970's the United States was expected to become at least as big a market for LNG as Japan. During tha last few years, all import schemes have either been cancelled or have been suspended indefinitely.

As always, with the benefit of hindsight, there are good explanations. One of the principal ones was price deregulation. The US Natural Gas Policy Act of 1978 effectively allowed constantly escalating gas prices and by the early 1980s had created a supply glut, the reverse of the situation prevailing when LNG contracts were developed. Initially, 'high cost' LNG could be accommodated, within limits, by rolling it in with lower priced locally produced gas against a backcloth of rising oil prices. It became unmarketable, though, when energy prices started to decline from their peak and lower priced local gas supplies became more than adequate for a declining demand.

The present role of LNG in Western Europe is a little better, but here again past expectations have not been realized. Among the contributory factors have been:

- The emergence of Norway as a major alternative gas source
- Growing availability of Soviet and Dutch gas at competitive prices
- A perception in Western Europe that North African LNG was becoming too expensive compared with alternatives
- The downturn in energy demand caused by rising oil prices in the late 1970s.

As far as Japan — the world's largest LNG market — is concerned, forecasts have been rather batter, albeit towards the lower end of the range than at the higher levels expected some years ago. Japan is a highly competitive market with nuclear and coal the main alternatives to LNG for power generation, which in turn comprises about three-quarters of tha existing outlet for LNG in Japan. These strong competitive pressures, as well as the technical need to allow for some oil-based generating capacity for load balancing purposes, are expected to moderate future growth rates for LNG as compared with the past.

Moreover, the extent to which new supply sources will be needed in the 1990's and beyond will be heavily conditioned by whether or not existing projects are expanded during their contractual lifetime, and/or extended when their contractual obligations expire.

JOBS & PEOPLE JOBS & PEOPLE

Michael S. Leo, who haa baan namad to tha newly-created position of aanior vice-preaidant and chief administrativa officer of Rhone-Poulenc Inc. Ha was previoualy with International Paper Company.

JIM D. GRIEBEL has been named marketing manager af power generation chemicals and business manager for the refining industry in the water treatment chemicals group at Nalco Chemical Company... LARRY J. REMONT has joined Petrolite Corporation as drilling fluids manager for the company's oil field chemicals group... FERRIL McCARTHY has been named to the newly created position of director of marketing of Widger Chemical Corporation.

FRED E. COOPER has been appointed senior sales representative at Virginia Chemicals Inc... DR. NEAL D. CONRAD has joined M&T Chemicals Inc. as a senior research chemist in the company's plastic additives research group... DR. HEINZ RZEHAK has been named managar of applied research and technical service at the Allendale, N.J., laboratory of Degussa Corporation's Chemicals Division.

JEFFREY A. FEISER has been appointed

J. Griebel

L. Remont

Cyclo Industries Names Technical Sales Reps

Cyclo Industries, maker of specialty chemicals for the cosmetics, soap and detergents, mining, plastics and petroleum industries, haa appointed Tom Burns and Larry Merchant as technical sales representatives.

Mr. Burns will be based in Cyclo'a Miami, Fla., headquarters and will cover the Florida market. He waa previously with McKesson Chemical Company.

Mr. Merchant will cover the Southeastern US and will be based at Cyclo's Atlanta distribution center. He was most recently with Van Waters & Rogers in Atlanta.

T. Burns

L. Merchant

sales representative for the Allied-Kelite Division of Witco Corporation, covering the Southwestern Ohio and East-Central Kentucky territory... JAMES J. MARKHAM has been named product manager for Metal Coatings International Inc.'s "Dacromet" corrosion resistant coating line.

F. McCarthy

F. Cooper

R. STEVE HUGHES haa joined Magnatrada Corporation as a manager of the company's Chemical Division and DWIGHT L. MOORE has also joined the firm as a Chemical Division manager... DELBERT F. TOLEN has been named West Coast regional manager for fluid cracking catalysts in the Ketjen Catalysts Group of Akzo Chemie America.

J.R. Crozier, who haa baan appointad vice-president and aasistant ganeral managar of USI Chamicals, part of National Diatillars & Chamical Corporation.

JOHN W. MATT has been appointed director of manufacturing in the Inorganic Chemicals Division of Mobay Corporation... JOHN G. AUSTIN has been named sales representative for the Ohio, West Virginia and Western Pennsylvania sales territory at Reed Plastics Corporation... DENNIS CARLETON has been appointed director of parenteral operations for E.R. Squibb & Sons.

JANIS A. BALDASSARI haa been appointed sales representative for Sanncor Industries in New Jersey, Pennsylvania, Maryland and Delaware... WILLIAM M. OLLER has been named executive vice-president of Texas Eastern Products Pipeline Company... EUGENE SECOR has been named facility manager for the Wilmington, Mass., hot metal adhesive production facility of the Adhesives, Sealants & Coatings Division of H.B. Fuller Company.

LARRY L. HAMMIT has been named caustic soda product manager in the Chemicals Group of PPG Industries.... MICHAEL B.

N. Conrad

D. Rzehak

Merck Appoints Two In Kelco Division

Merck & Co. Inc. has named Richard A. Empey director of quality assurance in its Kelco Division and Dr. Kenneth S. Kang director of microbiological sciences research in the division.

Mr. Empey has been responsible for implementation of Kelco'a quality certification program.

Dr. Kang will be responsible for identifying, evaluating and bringing to Kelco new biotechnology and biologically-derived products as head of microbiological sciences research. He was instrumental in the commercialization of Kelco's food-grade xanthan gum, "Keltrol," in the late 1960'a.

R. Empey

K. Kang

EDWARDS has been appointed director of quality management at Enron Chemical Company... ROBERT F. MENG has been named sales representative for "Tolonate"

J. Feiser

J. Markham

hexamethylene diisocyanate resins at Rhone-Poulenc Inc.

TIMOTHY R. SCOTT has been appointed a technical representative in the specialty industrial polymers group at Rohm and Haas Company... C. WILLIAM GRAY has been named vice-president of human resources at B.F. Goodrich Company.

MEETINGS CALENDAR

SEPTEMBER 1, 1986

THIS MONTH

AMERICAN CHEMICAL SOCIETY, 192nd annual meeting, Anaheim Convention Center, Anaheim, Calif., September 7-12.

CHEMICAL MARKETING RESEARCH ASSOCIATION, world chemical congress, jointly with the chemical marketing and economics division of the American Chemical Society, "The Chemical Industry: Where in the World Is It Going?", Newporter Resort Hotel, Newport Beach, Calif., September 7-10.

COUNCIL FOR RESPONSIBLE NUTRITION, annual meeting, "Health Messages: New Directions and New Opportunities," J.W. Marriott Hotel, Washington, D.C., September 7-10.

LATER ON

AMERICAN MICROCHEMICAL SOCIETY, eastern analytical symposium, jointly with American Chemical Society and Society for Applied Spectroscopy, New York Hilton Hotel, New York, October 20-24.

AMERICAN PETROLEUM INSTITUTE, annual meeting, San Francisco, Calif., November 9-11.

ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS, 100th international meeting and exhibition, The Registry Hotel, Scottsdale, Ariz., September 15-18.

ASSOCIATION OF THE NON-WOVEN FABRICS INDUSTRY, eighth international conference and exhibition, Georgia World Congress Center, Atlanta, Ga., October 21-23.

CANADIAN CHEMICAL PRODUCERS ASSOCIATION, international symposium on transportation emergency response, Vancouver, B.C., Canada, September 14-18.

CHEMICAL GROUP, NATIONAL ASSOCIATION OF PURCHASING MANAGEMENT, Fall Conference, Marriott Pavilion Hotel, St. Louis, Mo., October 21-23.

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION, seminar on aerosol technology, Ramada Hotel O'Hare, Rosemont, Ill., October 27-29; 73rd annual meeting, Marriott's Harbor Beach Resort, Fort Lauderdale, Fla., December 7-11.

CHLORINE INSTITUTE, Fall meeting, The Homestead, Hot Springs, Va., September 21-25.

COMMERCIAL DEVELOPMENT ASSOCIATION, impact of mergers and acquisitions on the future of technology-driven corporations, Hershey Hotel, Hershey, Pa., October 26-29.

CONFERENCE BOARD, business outlook conference, Waldorf-Astoria Hotel, New York, September 24-25.

COUNCIL FOR CHEMICAL RESEARCH, annual meeting, Northwestern University, Evanston, Ill., September 28-30.

EUROPEAN PETROCHEMICAL ASSOCIATION, annual meeting, Monte Carlo, Monaco, September 28-October 1; distribution meeting, October 19-October 22.

FERTILIZER INSTITUTE, world fertilizer conference, "Global Trading Patterns," Hyatt Regency Hotel, San Francisco, Calif., September 14-18.

FERTILIZER ROUND TABLE, Sheraton Inner Harbor Hotel, Baltimore, Md., November 17-19.

FIRE RETARDANT CHEMICALS ASSOCIATION, Fall conference on proper processing and selection of flame retardants, Kiawah Island, S.C., October 19-22.

FRAGRANCE MATERIALS ASSOCIATION OF THE UNITED STATES, 10th international congress of essential oils, fragrances and flavors, Omni Shoreham Hotel, headquarters hotel, Washington, D.C., November 16-20.

K-'86, 10th international trade fair for plastics and rubber, Dusseldorf, West Germany, November 6-13.

LATIN AMERICAN PETROCHEMICAL ASSOCIATION, sixth annual meeting, Rio Palace Hotel, Rio de Janeiro, Brazil, November 23-25.

NATIONAL ASSOCIATION OF CHEMICAL DISTRIBUTORS, 15th annual meeting, Ritz-Carlton-Naples Hotel, Naples, Fla., December 2-6.

NATIONAL PAINT & COATINGS ASSOCIATION, 99th annual meeting, Atlanta Hilton Hotel, Atlanta, Ga., November 3-5.

PULP CHEMICALS ASSOCIATION, 13th international naval stores meeting, Waldorf-Astoria Hotel, New York, September 16-17.

SOCIETY OF CHEMICAL INDUSTRY, chemical industry medal dinner, Plaza Hotel, New York, October 15.

SOCIETY OF THE PLASTICS INDUSTRY, plastics show and conference — South, jointly with the Society of Plastics Engineers, Georgia World Congress Center, Atlanta, Ga., October 8-10.

SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION, OSHA compliance trade fair and seminar, Intercontinental Hotel, New Orleans, La., September 25-26.

WOMEN IN FLAVOR & FRAGRANCE COMMERCE, annual open dinner meeting, Loew's Glenpointe, Teaneck, N.J., September 25.

BUSINESS BRIEFS BUSINESS BRIEFS

COMBUSTION ENGINEERING SIMCON Inc., Bloomfield, N.J., has been selected to supply an advanced process control system for the Qianjin Chemical Works of Beijing Yanshan Petrochemical Corporation. The project is part of an ethylene plant modernization contracted to Combustion Engineering-Lummus Crest Inc. by China Petro-Chemical International Company.

CYANOTECH CORPORATION, Woodinville, Wash., will use the proceeds of a $2 million private placement for expansion of production facilities for beta carotene at Kona, Hawaii. Cyanotech, a specialty producer of high value products from microalgae, is based in Woodinville and has large scale culture ponds and processing facilities in Kona.

DU PONT COMPANY will host a forum for leading industry executives to address competitive pressures facing the retailing, textile and apparel industries. The forum, called "Building Partnerships for Profit," will take place on September 13 at Amelia Island Plantation, Fla. Du Pont says the purpose of the meeting is to "lay the groundwork for more open and constructive dialogue among all sectors of the soft goods retail and supply industry."

MOONEY CHEMICALS INC. has appointed two additional sales agents to supplement its marketing program to the paint and ink industries. The new agents are W.T. Bryant & Associates, Cincinnati, and Samuel P. Morell & Co. Inc., Scarsdale, N.Y. Bryant will cover parts of Central and Southern Ohio and Wheeling and Huntington, W.Va. Morell will cover the New York metropolitan area and New England.

POWELL DUFFRYN TERMINALS INC., will install a state-of-the-art carbon adsorption system to treat surface water runoff prior to discharge from its Bayonne, N.J., facility. The company has signed a contract with Zimpro Inc., Rothschild, Wisc., for a packsga "Pact" wastewater treatment system, designed to handle a maximum of 55,000 gallons of runoff water a day.

RHONE-POULENC INC.'s Specialty Plastics Division has introduced three new 2-part silicone RTV's for molding, tooling and fabricating composites, "Rhodorsil" RTV 565, 1547 and 1556. The three products are available in 1-pound, 11-pound, 44-pound and 55-gallon kits.

SOCIETY OF THE PLASTICS INDUSTRY's Fall meeting will focus on the use of epoxy formulations in adhesives. The meeting will be held at the Marriott City Center Hotel in Minneapolis, Minn., September 10-12. The program will feature speakers representing user companies, university-industrial centers and suppliers. Product liability insurance will also be covered at the Fall meeting.

STOLT-NIELSEN has taken delivery of the fifth and last of the series of 39,000-deadweight parcel tankers by the builder, Daewoo Shipbuilding & Heavy Machinery Ltd. The tanker will be used on the company's worldwide parcel tanker trade routes, carrying a wide variety of acids, chemicals, edible oils, lubricating oils and additives, and cooled semi-gases.

UNICHEMA CHEMIE BV, the Netherlands, part of the Unilever Group, has started up a new production facility for high purity dimer fatty acids. In addition to increasing capacity, the new facility enables Unichema to add new grades of dimer fatty acids to its line of specialty chemicals.